

# AMERICAN RAILROAD JOURNAL.

## STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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### American Railroad Journal.

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### LETTER III.

*Kentucky, June 30, 1851.*

TO THE EDITOR OF THE R. R. JOURNAL:

In my last I gave you a short sketch of the roads under construction and proposed; by it you will see, that if Kentucky did sleep she has awakened with renewed vigor and strength, and is now imbued with a railroad spirit that will not stop nor rest till the iron horse is running his tireless race throughout the length and breadth of this beautiful State—"the Garden of the Union."

In my last I stated that I would in my next give you a description of the importance and connections of some of the roads. It is well known that Kentucky is in every respect a trading State; that is, her inhabitants sell every thing they raise, and buy every thing they consume; they manufacture nothing. The products of the State are of an extremely heavy nature, and very valuable—such as cattle, mules, hogs, hemp, tobacco, and grain of all kinds. The market for their cattle and mules is at the east and south. Baltimore, Richmond, Phila-

delphia, New York and New Orleans, and the southeastern cities, are the principal buyers of these products. The hogs find a temporary market in Louisville and Cincinnati; but are finally consumed, or have their final market in the large seaboard and manufacturing cities. The hemp principally passes south to the cotton fields in the shape of bale rope and bagging; and the tobacco finds its ultimate market in New Orleans, Baltimore, Philadelphia and New York. The grain is most of it walked off in the shape of stock. Such is the course that the products of Kentucky, immense in quantity and value, take to find their markets; and that, too, by the slowest and most expensive kinds of transportation from the interior, until they reach the great water courses; and the amount of money annually paid by the farmers of this State, as the cost of transportation, over and above the cost of the same work if done by railroad, would in a few years construct all the railroads ever required in Kentucky.

This is not all: for the interior of the State is, in its most densely populated portions, entirely devoid of the necessities of life—such as fuel, salt, iron and lumber; and these articles, heavy and expensive of land transportation, are carried from the Ohio and its tributaries to the interior in wagons, until the cost of carriage is more than the actual first cost of the articles. As an instance: coal is selling in Lexington at 20 to 25 cents, and in several villages along the line of the Maysville road at 28 and 30 cents per bushel; yet this same coal can be bought at Maysville at 5½ to 6 cents per bushel. This discrepancy exists in other articles that are transported in wagons. The farmers of Kentucky are great consumers of goods of all kinds, and groceries; and this State is about one of the best customers, both as regards amount of purchases, and punctuality of payments, that any or all of the eastern cities have. The dry goods and groceries thus purchased in the eastern cities, are hauled throughout the length and breadth of the State (if we except a narrow strip bounding the navigable and slack watered streams) in wagons at great expense, averaging generally about 13 cents per ton per mile; and as a necessary consequence, at the expense of the farmer, who not only pays the transportation expenses of everything he consumes, but also pays for the transportation of every thing he raises, to a market.

The reason why railways will benefit this and all other southern and southwestern States, is because they will reduce to the farmer the cost of transportation both ways. About the most important road in Kentucky, in this view, is the Maysville and Lexington road. It passes through Mason county, with a tax list of nine millions; through Flemming, with a tax list of four millions; through Nicholas, with three and a half millions; through Bourbon, with twelve millions; and through Fayette county with eighteen millions. Thus in 70 miles, passing through a small tier of counties, whose taxable property is forty-six and a half millions. Where is there a parallel case? This rich section of country raises immense products, and the people are great consumers; their supplies must pass over the Maysville road, as well as their products that are destined for an eastern market, for the reason that Maysville is the nearest point where they can get their necessities, and because it offers the shortest and cheapest route to the east.

Thus much for the Maysville road, by way of its local importance; now let us examine its connections. At Lexington it connects with a line of roads in operation to Louisville, and eventually to Columbus, on the west, and Nashville on the southwest. At Nashville a railroad connection unbroken will shortly be formed with Memphis, and even New Orleans, on the southwest, and with Charleston and Savannah on the southeast. A line of railway is also in course of construction from New Albany, opposite Louisville, to St. Louis, and even as far north as Chicago. Again at Lexington the Maysville road will also form a connection with the Danville road. While at the Maysville end it will connect, with the road via Big Sandy, with Richmond, Baltimore and Washington, by the shortest possible route, it will also connect with a road (the charter for which is obtained) in Ohio, extending from Aberdeen, opposite Maysville, to Hillsboro' 40 miles, where it will connect with the Cincinnati and Belpre line. The charter also allows the road to be extended from Hillsboro' to Columbus, where it will connect with all the roads culminating at that point. A road is also now being strongly agitated to extend from Aberdeen, opposite Maysville, to Chillicothe, about 60 miles—thence it will give a connection, via Zanesville, to Wheeling; and thence by the Hempfield road and the Pennsylvania railroad, it will give a direct

connection with Philadelphia and New York, by a route shorter and cheaper than by any other route. It is the first railway connection between the east and northeast and the west and southwest, after the Appalachian chain of mountains is passed; and must, from this fact, control an immense amount of through trade and travel.

The Big Sandy road I have spoken of, in my last, as to its connections and importance; and also of the Danville road. The Covington road next comes into view. It is an important road to Cincinnati, and must do as large an amount of local business as any road would do that has a rich and fertile country to supply, and a large and populous city to consume. It cannot, however, ever be anything else but a local road; and cannot, from its topographical position, ever possess the importance as a connection, that the Maysville road does.

The Louisville and Nashville road now attracts more attention throughout the State than almost any other work, as it forms the only unprovided link in the chain between the Ohio and the Gulf on the south, and the Atlantic on the southeast. It also forms a most important link in the great southwest and northeast chain; and from its geographical position, it occupies a most important attitude. It will pass through a most beautiful and fertile country, and also through a rich mineral district, and will, it is believed, enable Louisville to procure a constant steady supply of coal and iron at as low a rate, it not lower, than any other city on the Ohio; this alone will justify Louisville in aiding in its construction. It will also open up a section of country that has hitherto been almost inaccessible, except on horseback or in stages. It will be a connecting link, and the only one, between the great net work of railroads north of the Ohio, and the extensive lines of road in the States south and southeast of the Ohio; and must, from its position, command more trade and travel, both local and through, than any other road either south or west; and it cannot but result in a great and lasting benefit to the city of Louisville. Thus much for the importance and connections of the Kentucky railroads. In my next I will endeavor to give you a statement of the proposed mode of raising means to construct so large an amount of railroad.

Yours, LOCOMOTIVE.

Kentucky, July 6, 1851.

TO THE EDITOR OF THE R. R. JOURNAL:

In my last I promised to give you a statement of the proposed mode of raising means to construct the works at present under consideration in Kentucky.

The disastrous results connected with the Lexington and Frankfort railroad in its first construction, and also in its rebuilding (as it cost \$150,000 more than was estimated), had a great and all-powerful influence in deterring individuals from subscribing to the stock of any road, no matter how fair its prospects were for a large and lucrative business. This was so much the case, that but \$40,000, or less, was subscribed outside of Louisville, towards constructing that important work—and it was principally constructed by city taxation and city credit. Even the great results that have been realised since the construction of that road, from its present and prospective business, have no tendency to strengthen the people in the impression that railroads may be made to pay a fair per centage as an investment.

In order to illustrate more fully the mode of raising means, I will take the case of the Maysville

road—as its officers and friends have done more to aid in the construction of railroads throughout Kentucky, than any other set of gentlemen within the State.

The mode of raising the means is somewhat peculiar, and is entirely novel to Kentucky. As it must, however, have a tendency to throw a large amount of securities into the New York market during the next five years, it will perhaps be well for your capitalists to look closely to the merits of the securities: as they offer, in my estimation, by far the most desirable investment for capital that will be offered in the market; and I am informed that some of the securities have already been offered, and found a ready sale at even superior prices.

The friends of the Maysville road, shortly after the organisation of their company by the city subscription of \$150,000, became satisfied that they would not be able to realise a sufficient amount by private subscription to construct the work, and therefore turned their attention to devise ways and means to raise the balance. For this purpose they obtained the passage of laws authorising the counties through which the road passes, and which will be benefitted by the construction of the road, to take a vote in each county, as to the propriety of the different counties subscribing as a corporation, and levying a direct tax, of one per cent per year, to pay the amount of such subscription. This mode, when first broached, met with many friends—but soon became obnoxious, from its being oppressive, and it was abandoned. The friends of the road, still active, then proposed another plan; which was, that the counties should take a vote as to the policy of subscribing, and if the vote was in the affirmative, that the subscription should be made; and the bonds of the county so subscribing, should be issued to the company, with coupons attached, payable in New York city, thirty years after date—the county being taxed every year to pay the interest in New York city. Laws were passed by the Legislature, authorising the subscriptions in this mode, and compelling the proper officers of the county to issue the bonds if voted, and also to levy the tax and collect it. Under these laws, the board of the Maysville road called an election in the county of Mason, as to the propriety of that county (with nine millions worth of property) subscribing \$150,000 to the capital stock of the company. The question was thoroughly canvassed throughout the county, and met with considerable opposition; yet it was carried by about 600 majority, and the subscription was made, and \$50,000 worth of bonds issued to the company, and a tax of  $3\frac{1}{4}$  cents upon every \$100 worth of property in the county levied to pay the interest upon them; \$50,000 worth more will be issued next year, and a tax of 7 cents will be levied; the third year the whole amount of the bonds will be issued, and a tax of 10 cents levied to meet the interest, and so on.

The Maysville board, after meeting with success in the county of Mason, called a vote in the county of Fayette, which has eighteen millions worth of property, as to the propriety of subscribing \$200,000 to the stock of the road. The question was also canvassed in that county upon every stump and in every school-house; but it was finally carried by nearly 700 majority, and the subscription was made.

Then a vote was called in Bourbon county, with its twelve millions worth of property, and the sub-

scription was ordered, by about 550 majority, for \$150,000.

This is the mode by which the friends of railroads in Kentucky hope to be able to build their roads; and this is the class of security they intend offering for means to aid in their construction.—The constitutionality of such a subscription by the counties or cities, has been repeatedly decided by the highest judicial authority in this State; and this class of securities are the very best that can be offered. They offer the advantages of long date and punctual semi-annual payments. A large amount of property is pledged for the payment of interest and principal. They are not subject to repudiation—for the counties have no repudiating power. They are not subject to the fluctuations that State stocks are; and are given in good faith, by an honorable, high-minded people, to construct public works that must double the already large amount of taxable property in these counties; and the purchaser does not, as is often the case, look to some badly managed railroad company for the prompt payment of his semi-annual interest; but he looks to the treasurer of a populous and wealthy county for it. Surely, these bonds must attract the attention of capitalists. Again, they are endorsed by the railroad company—and thus all the private stock in the company is also pledged for their redemption. The mode adopted by the city of Louisville is to subscribe (as is the case with the Nashville road) one million—subject, however, to a vote of the people; if the vote is in the affirmative, the subscription is made, and \$500,000 is paid up by direct taxation; for the other \$500,000, the city bonds are issued at thirty years, with interest semi-annually in New York city.

Several counties in the State, along proposed lines of roads, have taken votes upon the question of county subscriptions—and in almost every instance it has been carried by a large majority; and it is within bounds, when I state that not less than three millions of this kind of security will be offered in your market during the next five years to come. Should these securities meet with a ready sale—and who can doubt their value?—this beautiful State will soon be among the foremost of the railroad States; and I have but little, if any doubt, but that her roads will pay as large dividends as any other roads in the Union:—1st, because they cost but little in comparison with the New York and eastern roads; 2d, because, owing to the mildness of the climate, and the comparative cheapness of fuel, they can be worked cheaply; and, lastly, because the wants for such means of communication are very great, and they must do a very large amount of business.

Yours, LOCOMOTIVE.

#### Pittsburgh and Cincinnati Railroad.

A highly important railroad movement was made last week in Ohio. Its object is the construction of a continuous line of railroad from Pittsburgh to Cincinnati, without crossing the Ohio River, and without making use of any part of those lines whose interests tend to divert trade and travel in other directions. Most of the lines in northern Ohio are interested in taking travel to the Lake shore, whilst the Columbus and Newark, and Cincinnati and Belpre lines, tend towards Wheeling and Parkersburg. A company has been for some time organized at Mount Vernon, with a view of making a railroad from the Ohio and Pennsylvania railroad, at its southern bend near Loudonville, to Columbus, by way of Mount Vernon. Another company has been organized at Springfield, where the Little Miami railroad terminates, to make a road from that point to our Pittsburgh road. Considerable sums have been subscribed to the stock of both these



companies, but both felt the importance of obtaining additional strength. A conference between the boards of directors of the two companies was held at Delaware, on Wednesday and Thursday last, with a view of uniting the strength of both companies on one line by a union of interests. At the request of the gentlemen interested, the conference was attended by Solomon W. Roberts, Esq., Chief Engineer of the Ohio and Pennsylvania railroad company.

The result was of the most harmonious and gratifying character, the terms of union were unanimously agreed upon, and it was determined to prepare a portion of the line for letting as soon as practicable. S. W. Roberts, Esq., was chosen consulting engineer of the company.

The line will be about one hundred and ten miles long, commencing on our Pittsburgh road near Loudonville, and running by Mount Vernon, Delaware and Marysville, to Springfield. Each of the four towns last named is a county town, and in each of the counties a county subscription has been authorized by a vote of the people.

At Mount Vernon, the line will cross the Columbus and Lake Erie road, and at Delaware, the Cleveland and Columbus road, and at Springfield, eighty miles from Cincinnati, the road will connect with two lines leading to that city, giving its passengers a choice of routes by the valleys of the Little and Big Miami. It will pass through the geographical centre of the state of Ohio, and through a very populous and highly flourishing country. Whilst the directors were at Delaware, a large and enthusiastic meeting of the citizens was held in favor of the enterprise, which was addressed by several speakers, among whom was Gen. C. Anthony, of Springfield, President of the Springfield and Mansfield railroad company, to whose energetic efforts the flattering prospects of the work are in a great measure due.

The president and directors of the Ohio and Pennsylvania railroad company, have long looked upon this connexion as one that will add greatly to the trade and travel of their line; and it was with their consent that their Chief Engineer was induced to aid in the preliminary arrangements for the undertaking. He returned immediately to his labors here.

Pittsburgh and Philadelphia and the Pennsylvania railroad company will derive many advantages from a direct and continuous railroad connection with Cincinnati, unbroken by the Ohio river, and which will not make use of a single mile of any line, the interests of which will tend to turn trade and travel either to the north or to the south of us. It will enrich the towns that it will touch, and the counties it will traverse, and the new Pittsburgh and Cincinnati railroad has our best wishes for its success.—*Pittsburgh Gazette*, July 1.

#### Survey of the Louisville and Nashville Railroad.

We are glad to have it in our power to announce that the committee appointed by our General Council, to have a survey made of the several routes, for a railroad from Louisville to Nashville, have secured the services of L. L. Robinson, Esq., engineer of the Maysville and Lexington railroad, who will, in the course of a week, enter upon his duties. Mr. Robinson is an active, an energetic and intelligent gentleman, and one of the most skilful and experienced engineers in the whole country. He has greatly distinguished himself by his vigorous efforts in behalf of the Maysville and Lexington railroad, and we have no hesitation in promising that he will be equally efficient in his new sphere. We heartily congratulate our city, and the country, on the proposed route, on the fortunate selection made.

Mr. Robinson will commence his duties in the course of a week, with an efficient corps.

We congratulate the friends of this great enterprise on the bright prospects ahead. Daylight is breaking. Matters begin to look as if we were in earnest, and the survey and estimates made, we hope the route will be located, and the road in progress at an early day. It now behoves the friends of the enterprise on both routes, to bestir themselves. The route selected will, of course, depend much on the amount of subscriptions to the road by the respective counties.—*Louisville Courier*.

#### New York.

**Lebanon Springs Railroad.**—We have received a copy of the report of the engineers appointed to make preliminary surveys, for the purpose of locating a railroad from Chatham through New Lebanon, to connect with the roads in Western Vermont. From Lebanon Springs the line follows up Lebanon Creek to Nichols' Summit, in Stephenstown, where two lines present themselves, one passing through Stephenstown and Berlin to Petersburg, where it would unite with the Boston and Troy railroad, over which a connection can be made with the Western Vermont railroad, at North Hoosac, and the Rutland and Washington road at Eagle Bridge. This route appears to be a feasible and cheap one, as the grades and curves are very favorable.

The other line, called the East route, passes through Hancock and Williamstown, Mass., crossing the Hoosac river at Noble's Bridge, near Williams College, and thence runs through Pownal, Vt., to East Bennington, where it meets the Western Vermont railroad.

The nature of the country through which the above routes pass, is such as to require considerable examination and surveys prior to the location of a railroad, in order to determine the most feasible route.

The estimates are as follows:—  
From Hudson and Berkshire railroad to Nichols' Summit, in Stephenstown, 16½ miles, about ..... \$352,000  
From Nichols' Summit to junction in Petersburg, (West line) 22½ miles ..... 313,500  
From Nichols' Summit to East Bennington, (East line) 30½ miles ..... 587,000

Thus the whole line would cost, in round numbers, by the West line, about \$666,000, and by the East line, nearly a million of dollars. The former would be thirty-nine, and the latter forty-seven miles in length.

#### North Carolina.

**North Carolina Railroad.**—The preliminary surveys of this road have been completed, and we have a copy of the report of the same submitted to the board of directors, at a meeting held at Raleigh, on the 12th of May, by the Chief Engineer, Walter Gwynn, Esq.

The road was projected to connect the Wilmington and Raleigh railroad, where the latter crosses the Neuse, with Charlotte; and the charter imposed, as a condition, that Raleigh and Salisbury should be intermediate points in the line. An examination of the map of the state will show that a straight line between Raleigh and Salisbury is crossed by the waters of the Haw and Yadkin rivers, and by their almost innumerable tributaries, embracing among the most conspicuous, New Hope, Rocky, Deep and Uharie rivers, with their branches. Any one who has travelled the direct road from Raleigh to Salisbury, by Pittsborough and Ashborough, will remember that that route is a continued succession of hills and valleys; and it must have occurred to the traveller that the road might be greatly improved by pursuing a more circuitous route through the numerous ravines which constantly present themselves on the one hand or the other. These hills which so much obstruct the common road, and the graduation of which to easy grades, would render it so serpentine and devious, and carry it so much out of the direct course, would affect in a much greater degree the route of a railroad; no line of any extent, either level or of a given inclination to the horizon, could be maintained, without resorting to a continued succession of

heavy cuttings and fillings, and an infinite series of abrupt curves. In many places, also, the ridges and hills that would be crossed, are composed of rocky ledges, which would add greatly to the expense of graduation.

These difficulties presenting an insuperable objection to a direct line between Raleigh and Salisbury, the most eligible route seemed to be towards the North, around the heads of the water courses above mentioned, where the surface would of course be much more unbroken. It was concluded, therefore, to locate the road through Hillsborough, Graham, Greensborough and Lexington, being much more easy of construction, and intersecting important business localities.

The board of directors, upon consideration, were satisfied of the superiority of this road to all others which had been surveyed or contemplated, and adopted it as the location of the road. The North Carolina railroad, therefore, will commence at the line of the Wilmington and Raleigh railroad, near Goldsborough, passing by Waynesborough, crossing the Neuse about four miles above Smithfield, by Raleigh, Crabtree Bridge, Hillsborough, Graham, Greensborough, Lexington, Salisbury and Concord to Charlotte, a distance of 223 miles. The grades nowhere exceeded fifty feet per mile, with no curves of less than five degrees deflection, and these occur in but very few instances. The cost of the road, laid with T rail, of sixty pounds to the yard, including engineering expenses, superstructure, land damages, and everything appertaining to the road-way, is estimated at a little more than three millions of dollars; or including equipment and workshops, \$3,400,000.

The road passes through an important portion of the state, embracing a variety of soil and productions. It will connect the rice fields on the Cape Fear with the cotton plantations of Mecklenburg, and every interest in the state will doubtless be benefited and fostered by its genial influence.

The directors are to put it immediately under contract, to be completed by the 1st of January, 1854, unless longer time be allowed by the board.

#### Railroad Tolls.

For some time past, the standing committee on railroads in our State Senate, have had under consideration a bill to impose canal tolls on the New York and Erie, and Northern railroads. Mr. Geddes, the chairman of the committee, submitted on the 2nd instant, an able and interesting report showing in the clearest light the injudicious operation of legislative enactments, which attempt to coerce the current of business into particular channels by unnatural restrictions.

The report adverts to the fact that the railroads mentioned are carrying passengers and property from the great Lakes to the cities on the sea coast—that these roads were constructed by the capital and enterprise of, and are now owned by, private citizens. At the same time the state owns canals that reach from the Hudson river to the great Lakes, and also owns lateral canals that reach from the main canal to the line of the New York and Erie railroad.

There can be no doubt that both these roads carry large quantities of produce and merchandize that, if there were no railroads, would go on the canals—thus, it is contended, lessening the revenues that the state would otherwise receive on its canals. But if this be the case, it certainly must be because these roads furnish inducements and facilities stronger than the state provides for this business, or they

would not get it. And it is difficult to see what real objection there can be against these roads for furnishing these facilities; or to see how the fact of furnishing these facilities can justify the state in laying a tax on the business they do. Their capital is taxed as is other property, to support the Government in all its expenses; to add to this a tax to be measured by the amount of good they do the public, would be unjustifiable in the opinion of the committee, and we think the good sense of the community will sustain them in this decision.

Having thus shown that the principle upon which these tolls have been levied, is unsound, the report proceeds to call attention to the unfair effects of this tax upon the localities that pay it. The New York and Erie railroad being now in operation, and carrying property without being taxed for doing so, takes merchandize from New York city to Cleveland, Ohio, for \$1 20 a hundred. The Central line carries for \$1 40, out of which they pay within a fraction, 30 cents for tolls; so that while the Southern line realizes \$1 20, the Central line in fact only gets \$1 10. It is very evident that under this arrangement, neither the canal nor the Central line will get the transportation of those goods which can be sent by the other line; and even now goods are taken from New York to Buffalo by way of Dunkirk. Hence it follows that if the system of tolls is continued on the Central line, by far the largest part of the sum will be paid on property produced or consumed on the line between Albany and Buffalo; and this section of the state will be virtually subjected to a local tax for the benefit of the canal revenue.

Under this view of the practical operation of the system of railroad tolls, the committee introduced and recommended the passage of an act to abolish tolls on railroad transportation, on all the railroads in the state, to take effect on and after the 1st of December next.

We trust that this will become a law, and we think every enlightened mind will become satisfied, upon a careful examination of the subject, that this is the true policy of the state, and will conduce to the best interest and greatest good of the greatest number of her citizens.

#### Indiana.

**Indianapolis and Bellefontaine Railroad.**—At the recent annual meeting of the stockholders in this company, the following gentlemen were chosen directors for the ensuing year: Jeremiah Smith, D. Heaston, and Peter S. Mills, of Randolph; James Truitt, Samuel P. Anthony and David Kilgore, of Delaware; Allen Makepeace, Wm. Sparks and Madison G. Walker, of Madison; Samuel V. B. Noel, of Hancock and Hamilton; Wm. A. Rifner, of Henry and Wayne; Richard H. Winslow, of New York; Theophilus Paulding, of Philadelphia; and Alfred Harrison and Oliver H. Smith, of Marion.

The board organized by the unanimous selection of Oliver H. Smith, Esq., for President, and Thos. A. Morris, Chief Engineer.

The President submitted a brief report of the operations of the company the past year, from which we learn that there is now in successful and profitable operation 36 miles of road, extending from the capital of the State to Anderson, constructed in a permanent manner with gravel ballast, oak superstructure and a T rail of over 60 lbs. to the yard, and costing less than \$10,000 to the mile—(the average cost of American railroads being three times that amount.)

The grading and bridging are completed from Anderson to Muncie, 18 miles, and everything is in readiness to lay the iron as soon as it arrives; so that in all probability the road will be completed to Muncie early the coming fall. The third section of about 30 miles, from Muncie to Union, is all in the hands of contractors, ensuring its completion early in the ensuing spring. It may therefore be expected that by the close of next year cars will be running upon the whole line.

We think that this company will not have to pay for that dinner, which is to be eaten at somebody's expense, when the whole route from Lake Erie to Indianapolis shall be completed.

Before the first day of January, 1853, there will be a continuous line of railroad from New York, Boston and Philadelphia, to Terre Haute, Indiana. The divisions in Ohio and Indiana, that compose a part of this great chain, have been pushed forward with extraordinary energy, and those engaged in their construction deserve the gratitude of the whole country.

#### The Hempfield Railroad.

We have received the report of the reconnaissance of the route of this road, by Charles Ellet, Jr., Chief Engineer, from which we learn that no obstacle exists to the employment of a very direct route, of less than eighty miles in length, and with moderate grades. Diverging from the Central railroad at Greensburg, the road would probably cross the Youghiogheny river at or near Robbstown, and continue to Washington, either via Williamsport or Belvernon. From Washington to Wheeling it may follow the tributaries of the Chartier and Buffalo creeks to West Alexandria, and thence descend along the valley of Wheeling creek to the Ohio river at Wheeling, or by the valley of Buffalo creek to the same point by the way of Wellsburg.

There are other routes which will need inspection, and possibly instrumental examination, before the location of the road is finally adopted.

The great merit of the work consists in its favorable position, being on the direct route from Philadelphia to the great cities of Cincinnati and St. Louis. Passengers on the Ohio river might be taken at Wheeling and delivered, says Mr. Ellet, in less than three hours at Greensburg, whence they would be borne as far as Harrisburgh on the Central railroad, before they could reach Pittsburgh by the river, even when the Ohio is in its best navigable condition. The importance of the route, he says, will be seen at once, as commanding a large share of the travel of the Ohio, destined to the cities of Philadelphia, New York and Boston. The Central railroad of Ohio, passing through Columbus and Zanesville, and now in great part under contract, will find a route more than 50 miles shorter to Philadelphia, by the Hempfield and Central roads, than by the way of Pittsburgh, or any more northern rival.

The road just about to be commenced from Cincinnati, through Wilmington and Circleville, to Zanesville, will deliver passengers in Philadelphia by the way of Wheeling, Greensburg and the Central railroad of Pennsylvania, by a line 60 or possibly 70 miles shorter than the Pittsburgh route, while a new source of trade, and a new element of prosperity, has recently been opened to the company, in the proposed diversion of the Cincinnati and Parkersburg road to the town of Marietta, with a view to a connection with Philadelphia through the Hempfield line. It is now certain that a subscription of \$350,000 to the stock of this, one

of the greatest works of Ohio, passing through a region where it will meet with little or no competition, has been made on the express condition that the Ohio river shall be approached at Marietta. If the subscription be accepted on those terms, this trade, which has been for many years regarded as the peculiar tribute of Baltimore, will be directed to Philadelphia by means of the Hempfield line.

The report also expresses the opinion that this line will secure the trade and travel of the entire route soon to be opened from Nashville, Tenn., through the central part of Kentucky, and thence over the Lexington and Maysville and Scioto and Hocking Valley railroads, to the great Ohio Central road. This will be an important route, being very direct, and one which from its natural position will be free from the competition attending more northern roads; and much of this trade would naturally flow through the Hempfield line to the Philadelphia and New York markets.

Mr. Ellet recommends the early opening of that portion of the line from Wheeling to Washington, 32 miles, which would be immediately productive of a good income; and it is to be presumed that such an important link of connection will be prosecuted with vigor to a speedy and successful termination.

#### Texas.

**Mexican Gulf Railroad.**—We learn from a late number of the Western Texan, that the citizens of Bexar county are pushing forward the project of a railroad from the city of San Antonio to the Gulf, with great energy and perseverance. The city and county have subscribed each \$50,000, making \$100,000; and the individual subscription amounts to nearly as much more. Should the enterprise thus begun be carried through to a successful termination, that portion of the State from the Colorado to the Neuces, will rapidly increase in population and prosperity. The climate in western Texas is described as salubrious, and the soil rich and productive.

#### Virginia.

**Blue Ridge Tunnel.**—We were very much gratified on visiting the tunnel this week, at seeing the rapid progress that has been made in that work.—If the hands be kept steadily employed, we think it may be safely said, that it will be completed in a week.

The heavy work along the Blackwater, between the tunnel and the town, is also being performed, we think, with as much rapidity as could be expected. The work of laying the rail has been commenced, we are informed, a few miles from town, and considerable advance made. As soon as the metal can be transported upon the track, instead of by wagons, as at present, the work will of course proceed more rapidly.—*Lynchburg Virginian.*

#### Railroad from Pittsburgh to the Erie Road.

The people of western Pennsylvania are moving to secure the construction of a railroad from Pittsburgh to the Erie railroad. A numerous attended convention was held at Warren, Penn., a short time since for this purpose. Committees were appointed to collect and disseminate information in reference to the proposed work, to open books of subscription, and to raise funds necessary to make surveys, etc. The whole distance, in case the valley of the river should be followed, is 215 miles. The route traversed is known to be one of the richest mineral and agricultural regions in the United States. Among other things, the convention

Resolved, That the New York and Erie railroad being completed, now is the appropriate time to move forward in the important work of connecting



the city of Pittsburgh with the city of New York, by a connecting link along the valley of the Allegheny river, a distance of about 215 miles, if the valley is adopted all the way.

Resolved, That the iron ore and stone coal which abounds in the counties of Allegheny, Armstrong, Clarion, Butler, Venango, Warren, Elk, McKean, and the adjoining counties of Pennsylvania, and the pine and other valuable forests of lumber land in the counties of Cattaraugus and Chataque, N. Y., and McKean, Warren, Elk, Clarion, Forest, Venango, etc., in Pennsylvania, combined with the rich agricultural lands which lie broadly expanded along the whole line of the proposed road, and the great advantage of water power for manufacturing purposes, furnish the basis for an amount of business to be thrown upon it which would fully justify the construction of the road, and render the stock a good investment.

Resolved, That this convention will use their best exertions from this time forth, to promote and facilitate the commencement and progress to completion of this great work, and call upon all the good friends in western New York and Pennsylvania to do likewise.

#### Boston and Montreal Railroad.

We understand the contract to complete the Montreal railroad from Warren to Wells River, its final terminus, has been taken by Warren H. Smith, Esq., of Sanbornton. It is to be ready for the rails in October 1852. The White Mountains road is under contract as far as Littleton and to be completed at the same time. The two roads connect at Wells River. The Atlantic and St. Lawrence road will probably be completed through New Hampshire, about the same time, so that the short piece of road, about twenty miles, from Littleton to Lancaster, will only be wanted to make the connection with that road. The Atlantic and St. Lawrence, it is said, will be completed through in two years from next fall—if so, it is probable the connection will be from Boston to Montreal direct, over the Montreal railroad, by that time.

#### Railroad around the South Shore of Lake Michigan.

In our last we gave the result of the recent conference between the two Michigan railroad companies, upon the subject of a common road around the south shore of Lake Michigan. The conference ended in nothing. We have now a copy of the correspondence between the companies in reference to this matter, which in substance is as follows:

The Michigan Southern and Northern Indiana railroad companies, through a committee of which Geo. Bliss, Esq., was chairman, proposed to the Michigan Central, the following basis for a permanent contract for the transaction of business between Michigan city and Chicago:—that the former will proceed at once to finish the road from Michigan city to Chicago, and open the same for use probably by the 1st of March next; and that they will cause to be transported each way over said road the passengers and merchandise of the said Central company, delivered to them at Michigan city and Chicago, with as much despatch as they transact their own similar business over the same part of the road, and at the same rate per mile mutually agreed upon by the parties from time to time, for similar through passengers and merchandize between Chicago and Lake Erie upon both roads; the business of the Central company to be done in their own cars if they prefer, they being allowed a reasonable compensation for the use of them, &c.

To this note, John M. Forbes, Esq., chairman of the committee in behalf of the Central company, replied that the arrangements of that company are such, that he does not believe they will give up their present intention of building a road from Michigan city to Chicago the present season.—

They also submit a proposition to do business on that road for the Michigan Southern company.

To this proposition Mr. Bliss replies, that the Indiana company (a part of the Michigan South) possesses an acknowledged chartered authority to construct a railroad through northern Indiana, and around the head of Lake Michigan, and that no other company possesses authority under which they can legally construct such a road. He also objects to the route of the road proposed to be built by the Central company, as being circuitous, &c.

To this the Central company replies, that the road proposed to be built by them will be a direct one, and that no legal obstacle exists to its construction; and winds up the correspondence by saying that the Southern company have a curious "mode of consulting the public welfare by insisting upon a monopoly in Indiana."

The next step we suppose will be this, the Central company will commence the construction of a road around the south end of the Lake, under the charter of the *New Albany and Salem Road*, which allows that company to extend their line to any part of the State. The Southern company will then apply for an injunction, for the purpose of testing the legal rights of the belligerents.

We stand in a similar relation to both of the above companies; and we do not know that we have any reason to doubt that if the Central road enjoyed the rights claimed by the Southern, they would be as illiberal and monopolizing as the latter is charged with being. Railroad companies generally take all the power they can get, and wield it as far as they can to their own advantage. This is looked upon as a right which all possess to make the most they can out of their own privileges. But there is a limit to the individual right, and this is those of the public; and it is in insisting upon a privilege hostile to public good, that the Southern railroad have taken an unwise and untenable position, in claiming the monopoly of route around the Lake. The affair now is not between the two railroads, but between the Southern railroad and the public. If they have the exclusive right to build a road on the Lake shore, they have a right to exact their own terms. Those who wish to use the road are entirely at their mercy. Now this doctrine will not go down in this country. The Southern railroad company may charge what they chose for the carriage of freight and passengers—but we apprehend that the people of Indiana are not going to allow them this privilege, and at the same time refuse a similar one to all others. Not they. The more roads the better. Competition brings down charges. After the position of the Southern railroad is fairly understood, it will be no longer difficult to obtain a plenty of charters to build as many roads over the disputed territory as the most zealous anti-monopolist would wish to see.

The exhibition which the above companies have presented to the public, shows the importance of general railroad laws in all the States. Indiana should follow the example of New York. In this State we are not compelled to apply to the Legislature to obtain authority to build railroads; consequently, there is no room left for favoritism or monopoly. Every man is thus made a judge of the safety of his own investments. We allow no monopoly in the right of way.

The above companies should settle their differences at once. If they cannot agree, let them refer their disputes to three disinterested men. Any other course implies, on the part of the party refusing, the want of a disposition to do the fair thing.

#### Mineral Wealth of Missouri.

There is probably no State in the Union where are found so great a variety, and such inexhaustible quantities of mineral wealth, as the State of Missouri. She is celebrated for her iron mountains; she has rich and extensive mines of lead, copper, cobalt, nickel, and other rare and valuable metals; but to cap the climax, she has coal mines of such marvellous extent and richness as almost to defy belief. It is stated that there is in Callaway county, near the centre of the State, a stratum of the purest cannel coal, *seventy-five feet thick*, and covering an area of several miles in extent. The value of this mine is much enhanced by its location. It is within less than two miles of extensive mines of iron ore, and in the midst of a rich agricultural region, immediately on the Missouri river, and just opposite the mouth of the Osage, one of the largest tributaries of the Missouri,—where provisions of every kind are cheap and abundant, and where the greatest facilities exist for obtaining a market for their mineral treasures.

The editor of the *Fulton Telegraph*, who has visited the works of the Callaway mining and manufacturing company, gives the following account of these coal beds:

"A region of country several miles square, embracing all the lands of this company, must be entirely underlaid with immense fields of the richest cannel coal. We visited the 'Mammoth Bank' and found that here the coal crops out in a bluff bank of some two hundred feet in length and at different points of a thickness from three to ten feet. A shaft had been sunk here and the vein found to have a depth of twenty-four and a half feet. A quarter of a mile southeast, and three quarters of a mile, and one and a half miles west of the 'Mammoth Bank,' coal crops and appears in large quantities. These latter we did not see.—But three and a half miles west is the 'Mastodon Bank,' and a great one it is. It has been shafted to the depth of 85 feet; 11 by 11, seventy-five and a half of which is the pure cannel coal—a thickness of vein without an equal in the world. Drifts were run 33 feet south, 11 feet east, and 11 feet north, in order to ascertain the dip and extent of the mines. Near the mouth of the shaft lay some 15,000 bushels of coal—much of it in large blocks.

"This coal crops out at other points we did not visit. The 'Mammoth' and 'Mastodon' satisfied us that these coal fields are without a parallel, and may be mined for ages and not be exhausted. It is of remarkable purity—without any intermixture of lead, zinc or sulphur. Sulphur when found forms the base of the beds of coal, but it is not intermixed. From the evidences we saw, we should think that iron ore in great quantities lies near these cannel coal banks.

"About one and a half miles west of the Mastodon, on lands of the company, iron is found in immense quantities—lies on the surface in great blocks. This bank has been opened in several places and found to be of great extent and of very rich quality. This vein has been traced a half mile and is over a hundred feet in width on the surface of the ground. Iron ore appears at many other points in the vicinity, which we did not see. There cannot be a doubt but that the iron resources of the company are quite as extensive as the cannel coal."

#### Railway Iron for the Jeffersonville and Columbus Railroad.

Two hundred and fifty-three tons of railroad iron (Trails of 56 lbs. to the yard) were delivered at the Jeffersonville wharf, a few days since, for this railway. Two hundred and seventy-one tons of the same shipment are at Cincinnati, to be delivered at Jeffersonville this week. This shipment of five hundred and twenty-four tons was made from Liverpool by way of New York, the Erie Canal and Lake, and the Miami Canal to Cincinnati.

The iron was delivered in New York, duty paid, at \$41 per ton. The freight and charges from New York to Jeffersonville landing, amounted to \$8 75





McRae, deserves the highest credit for the energy and ability which he has manifested, under many trying circumstances, in the management of the road, and we trust that its improved condition, while it adds so greatly to the comfort of the travelling public, will result in largely increased profits to the stockholders."—*Savannah Republican*.

#### Connecticut.

**Swift River Railroad.**—A meeting of the stockholders and other friends of the Swift River railroad, was held in Enfield on the 3rd inst. Addresses were delivered by individuals from the several towns interested in this enterprise, and a vote was passed in favor of an immediate organization under the charter. In pursuance of said vote, the stockholders made choice of the following board of directors:—Hon. Thomas W. Williams of New London; Hon. John Warner of Greenwich; Epaphras Clark and Alvin Smith of Enfield; Emilius Bond of Palmer; John Hill of Athol; Warren Hale of Dana; Thomas Sherman of Ware; Robt. Carpenter of Orange; William Smith of New Salem; Lucius Sibley of Petersham; and Benson Aldrich of Belchertown.

#### Illinois.

**Peoria and Oquawka Railroad.**—The subscribers to the stock of this road met at Knoxville, Knox county, Illinois, on the 20th ult., and elected the following board of directors:—Messrs. Charles Mason and James W. Grimes, of Burlington, Abner C. Harding and Samuel Webster, of Monmouth; James Knox and Julius Manning, of Knoxville; Asa D. Reed, of Farmington, and Rodolphus Rouse and Washington Cockle, of Peoria.

The board organized by the election of James Knox, Esq., President, Robert L. Hannaman Secretary, and William Phelps, Treasurer.

About \$400,000 has already been subscribed to the stock of this road, and resolutions were adopted to the effect that the directors be desired and instructed to take immediate measures for the survey, construction, and completion of the road between Peoria and Farmington at the earliest possible period, and in the most permanent and substantial manner; and also declaring that the faith of this company is pledged to the completion of this road from Peoria to Monmouth, and thence to a point on the Mississippi river, opposite to Burlington, in the state of Iowa, leaving that part of the main trunk of said road between Monmouth and Oquawka, to be completed after such branch to Burlington shall be built; and upon the faith of this pledge this company has received and will continue to receive public and private subscriptions from the corporation and citizens of Burlington.

The following is a statement of subscriptions to stock:—

#### PRIVATE SUBSCRIPTIONS.

"Burlington .....	\$80,000
"Warren .....	20,000
"Knox .....	41,000
"Farmington (exclusive of Knox county subscriptions) .....	22,000
"Peoria .....	32,000
	\$195,000

#### CORPORATE SUBSCRIPTIONS.

Burlington city subscription .....	\$75,000
Warren county .....	50,000
Peoria city .....	75,000
	200,000

Total .....

The road will, we should think, be not far from 100 miles long, including the Burlington branch, and can be built probably at the minimum cost of Western roads. Its concerns are in good hands, and will be well managed. The president of the

company, Mr. Knox, is very favorably known in this state, and the reputation which he enjoys here will be of great service to the company when they come into market for money.

**Northern Cross Railroad.**—The requisite preliminary arrangements to the speedy commencement and energetic prosecution of this work, are nearly projected. The Chief Engineer, S. D. Eaton, Esq., with a corps of engineers, is now in the field, making the necessary surveys preparatory to letting.

#### Pennsylvania.

**Pittsburgh and Steubenville Railroad Company.**—The commissioners and corporators of this company, which was incorporated by the Legislature of Pennsylvania, in March, 1849, met at the house of Mr. James Smith, on the Pittsburgh and Steubenville road, in Washington county, Pennsylvania, on the 27th ult., for the purpose of taking further and efficient measures for organizing the company. The meeting having been addressed by several distinguished speakers, resolutions were adopted that books for subscriptions be re-opened, and a committee of six were appointed to prepare an expose of the importance of the immediate commencement of the road, and to take such measures as may in their opinion be proper to effect the necessary subscriptions, and to procure the legal organization of the corporation. Hon. Charles Naylor was also unanimously chosen agent of the subscribers, to use his influence and exertions in advancing the interests of the road; and from the decided spirit exhibited at this meeting, there is every probability of the speedy accomplishment of the work.

#### Railroad Items.

**Scioto and Hocking Valley Railroad.**—There are 700 laborers working on the Scioto and Hocking Valley railroad, and much of the line is ready for the superstructure.

**Orange and Alexandria Railroad.**—The Alexandria Gazette, says:—The bonds authorized by the stockholders of this company, at the last annual meeting, to the amount of \$360,000, have been negotiated with an eminent banking firm in Washington. With ample means at command for the purpose, the eastern and middle sections of this great work will now be pushed on to completion, with energy and rapidity.

**South-western Railroad.**—The iron upon the south-western road has been laid to within a mile or two of Oglethorpe, and the cars will pass over the entire road in a few days.

**Danville and Lexington Railroad.**—Boyle county Kentucky, has voted \$150,000 to the Danville and Lexington railroad.

#### Steam on Canals.

The application of steam power to the towing of boats on our canals, has been for many years a desideratum among scientific men. The great difficulty of propelling boats heavily loaded, through the narrow channels of a canal, without producing such a commotion in the water as to seriously injure the banks or endanger the safety of the works, has, it is stated, been overcome, and an experiment recently made has been crowned with complete success. A small steamboat recently arrived in this city with three heavily laden barges, which she had towed from Norfolk, Va., up the Potomac river, to the Cumberland mines, and thence through the Alexandria canal, the Chesapeake and Delaware canal, up the Delaware river, and through the Delaware and Raritan canal, to New York, a distance of nearly five hundred miles. She is a small boat of about one hundred tons burden, and has two engines rated at fifteen horse power each;

and the only things that differ from ordinary steamboats are the peculiar shape of her buckets and the addition of a float back of the wheel, which is in the centre of the boat. The wheels are bent so as to form the segment of a circle, and they enter and leave the water without creating the great motion caused by the ordinary paddles. Should however, the power required cause any swell, the raging waters are smoothed down and pacified by the float that follows the wheel. This float can be raised or lowered as circumstances may require. It is stated that a boat of similar construction is soon to be put on the Erie canal.

#### Indiana.

The *Indiana State Journal* states that the iron is laid on the Indianapolis and Terre Haute railroad to Eagle Creek, over three miles west of that city, and is now being put down at the rate of a third of a mile per day.

**Madison and Indianapolis Railroad.**—The following gentlemen were elected directors of this road at a meeting of the stockholders, held at Madison on the 25th ult.:—John Brough, Jos. G. Marshal, W. M. Dunn, Jesse D. Bright, Jesse Whitehead, Zach. Tannehill, Jas. Whitcomb, Jas. M. Ray, Harry Bates, Thomas A. Morris, Sam. Moore, R. H. Winslow, and Jas. Winslow.

**Lawrenceburg and Upper Mississippi Railroad.**—A mass meeting of the friends, stockholders, and all others interested in the rapid and early completion of this road, was to have been held at Greensburg on the 4th inst., on which occasion reports of the progress, prospects, and wants of the company were to be presented, and a strenuous effort made for the furtherance of the work.

#### New York.

**Syracuse and Binghamton Railroad.**—The following gentlemen have been elected directors of the Syracuse and Binghamton railroad:—Horace White, J. R. Lawrence, Thomas B. Fitch, Alfred H. Hovey, Henry A. Dillaye, H. Baldwin, of Syracuse; Henry Stephens, Alanson Carley, Jedediah Barber, Israel Boles, of Cortland; Daniel S. Dickinson, Hazard Lewis, of Broome, and Leander Babcock, of Oswego.

It is said that the friends of this line intend to push it ahead with all possible dispatch. We hope they will. They have been talking about doing so long enough.

#### Eastern Terminus of the Belpre Railroad.

We find the following curious paragraph in the *American Railroad Journal*, of the 21st inst., viz.:

"The recent resolution of the Cincinnati and Belpre company, to make Marietta a point, and abandon their connexion with Baltimore, is likely to turn the trade of Southern Ohio into the lap of Philadelphia, through the Hempfield line, which promises at present to be the trunk line for several important branches in Ohio."

In reference to the above statements we should like to inquire:—

1. When did the Belpre and Cincinnati company resolve to make Marietta a point?

2. When did they "abandon their connexion with Baltimore"?—a connexion, by the way, which has never been formed.

3. Who is the Railroad Journal's informant?

No such resolution as that paper refers to ever passed the Belpre board.—*Scioto Gazette*.

The Cincinnati and Belpre company may not have passed any special resolution to make Marietta a point in their road, but it is notorious that they intend to run to that town. A large amount of their subscriptions are based upon this condition, and these subscriptions are included in their statement of the means of the company. (See Mr.

Cutler's speech at the late celebration at Chillicothe.) In addition to this the President of the company, Mr. Cutler, recently visited Philadelphia for the purpose of calling the attention of the people of that city to the importance of a railroad from Wheeling to Marietta, and received assurances, we have good reason to believe, that the people of Philadelphia would provide means for this line, all of which is pretty good proof that the Cincinnati and Belpre company are resolved to go to Marietta, to say nothing of still stronger inducements.

The efforts made to interest the people of Philadelphia in the line from Wheeling to Marietta, proves that the Cincinnati and Belpre company are desirous of opening a business communication with Philadelphia. No prominence has been given to this idea till very recently, which shows that there has been a change of opinion in this respect. We were a little too fast, perhaps, in saying that the Cincinnati and Belpre company intended to abandon Baltimore. The idea we should have conveyed was, that they were looking to a choice of markets, and regarded a connexion with Philadelphia as more important than with Baltimore. Such we believe is the fact. The company is desirous of having an outlet to Baltimore, we have no doubt, as two markets are better than one. But that Philadelphia is at the present time preferred of the two, we have no doubt. The Parkersburg railroad cannot be completed for years, and the Cincinnati and Belpre company will be compelled to push their road north to secure to it full usefulness and efficiency. It will not only be pushed to Wheeling but to Wellsville, to meet the Cleveland and Pittsburgh railroad, which will carry the line to Lake Erie. The first point made by the Gazette is a bit of special pleading, with the merits entirely on our side. On the second we believe we are more than half right. The above company prefer Philadelphia, but would like an outlet to Baltimore, which they cannot have for a long time, without going to Wheeling. This makes Marietta a convenient point in the route. Upon the last point we will not join issue.

#### Quebec and Halifax Railroad.

We copy the following from the speech of the Hon. Mr. Howe, made by him on the occasion of a public dinner given him when in Toronto:

"Mr. Chairman, allow me to say, that while you in the back country of Canada are clearing your farms, and building your towns, and rearing your cities and villages, Nova Scotia is constructing the wharves from which your produce may be transferred to ships."

This was at Toronto: a city 1200 miles distant from Halifax, by the railroad proposed by Mr. Howe. How much will it cost to transport by railroad from the former to the latter city? about \$25 per ton. How much from Toronto to New York? not over three; and after the enlargement of the New York canal, not much over two dollars. Will the people of Toronto send their wheat to Halifax for shipment? There is no more relation between Halifax and Toronto which should make the former the port of the latter, than between Halifax and Kamtschatka. The recklessness of Mr. Howe's statements, and the utter ignorance which he displays upon all practical subjects, will soon destroy all confidence in his opinions. Something besides fancy is required to build railroads; and a person who has nothing else, is not fit to talk about, much less to be entrusted with, their management. Mr. Howe has either lost his temper or his reason, and

will certainly be the death of his project, if he does not leave off making speeches.

Abstractly we should like very much to see the Halifax and Quebec railroad constructed. It is a great project, and would prove a benefit to the country traversed. Here lies the argument in its favor. It cannot be defended on the ground that it will become the route of commerce, or make Halifax the shipping port for the Canadas. We have never seen this attempted to be proved. We do not understand nor sympathise with the political considerations urged, but look at the road simply as a commercial enterprise. As such, we have discussed its merits. If constructed, we wish to see it done *secundum artem*. We are quite willing to see our neighbors undertake it if they wish to, but we want them to understand what they are about before they commence.

#### AMERICAN RAILROAD JOURNAL.

Saturday, July 12, 1851.

#### European and North American Railway.

THE undersigned, the three persons first named in the first section of an act passed by the Legislature of Maine, and approved the twentieth day of August last past, entitled "An Act to incorporate the European and North American Railway Company," and being specially authorised therefor in and by said act, hereby give public notice that, for the purpose of receiving subscriptions to the stock of said company, as established by the act aforesaid, according to the provisions thereof, not exceeding forty thousand shares, books of subscription will be opened under the direction of the undersigned, according to the regulations prescribed, at the time and places following, viz:—On WEDNESDAY, the Twentieth day of August next, At Calais, Maine, with Noah Smith, Jr., Esq.

Eastport, do.	Col. Bion Bradbury.
Machias, do.	Walker & O'Brien,
Ellsworth, do.	Seth Tisdale, Esq.
Oldtown, do.	Geo. P. Sewall, Esq.
Bangor, do.	Geo. W. Pickering, Esq.
Orono, do.	Hon. Israel Washburn, Jr.
Waterville, do.	Hon. Timothy Boutelle.
Brunswick, do.	Prof. William Smyth.
Augusta, do.	B. A. G. Fuller, Esq.
Belfast, do.	John Y. McClintock, Esq.
Portland, do.	John B. Brown, Esq.
Portsmouth, N.H.	Hon. I. Godwin.
Salem, Mass.	Stephen A. Chase, Esq.
Boston, do.	Francis Skinner & Co.
Lowell, do.	John Wright, Esq.
Worcester, do.	Charles Washburn, Esq.
Providence, R.I.	Billings Brastow, Esq.
Hartford, Conn.,	Hon. C. F. Pond.
New Haven, do.	Allen Prescott, Esq.
New York, N.Y.,	R. & G. L. Schuyler, No. 2 Hanover street.

Said books will remain open for ten successive days at the places and with the persons aforesaid. Dated at Portland, this sixteenth day of June, A. D. 1851.

ELIJAH L. HAMLIN,  
ANSON G. CHANDLER,  
JOHN A. POOR.

#### To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address J. B. GRAY, care of A. G. HOLMES, 108 Arch st., Philadelphia.

July 10, 1851,

4m

#### Stock and Money Market.

The money market continues pretty much in the same condition as at our last report. Money is still sufficiently abundant in the ordinary business channels; but for railroad securities the market is somewhat stringent. Money must continue in demand so long as the shipment of specie continues to the extent to which it has gone forward for some time past. The bonds of the Wilmington and Manchester road, which were taken by bona fide bidders, sold remarkably well, somewhat above the market rates, showing the high opinion entertained of this work. This road occupies a very prominent position in the public eye, which materially adds to the market value of its securities.—For bonds of new works, from 85 to 90 is about a fair quotation; but the sales are so often connected with the purchases of iron, and machinery, that it is impossible to give quotations applicable to even a majority of cases. Our railroad companies are still able to supply themselves with what they need, and the work on all our lines in progress, is going forward with extraordinary energy and rapidity.

The earnings on most, if not all our roads, continue to show a great increase. The receipts on the Erie canal are \$200,000 in advance of last year, though the tolls have been reduced 25 per cent—a striking proof of the necessity of its enlargement. Below will be found a statement of the receipt of some of the leading articles compared with the receipts of last year.

The Evening Journal gives the annexed statement of the quantity of flour, wheat, corn and barley, left at tide water during the 4th week in June, in the years 1850 and 1851, as follows:

	Flour. bbls.	Wheat. bush.	Corn. bush.	Barley. bush.
1850....	60,110	23,080	368,639	1,320
1851....	76,881	39,351	316,742	1,100
Increase.	16,771	16,271	Dec. 51,897	220

The aggregate quantity of the same articles left at tide water from the commencement of navigation to the 30th June, inclusive, during the years 1850 and 1851, is as follows:

	Flour. bbls.	Wheat. bush.	Corn. bush.	Barley. bush.
1850..	633,420	220,904	1,290,391	111,945
1851...1,141,906	534,704	2,886,811	99,716	
Inc....	508,486	313,800	1,596,420	dec.12,929

The aggregate quantity of the same articles left at tide water from the commencement of navigation to the 30th June, inclusive, during the years 1849 and 1851, is as follows:

	Flour. bbls.	Wheat. bush.	Corn. bush.	Barley. bush.
1849....	769,641	483,658	2,171,610	94,201
1851....1,141,906	534,704	2,886,811	99,716	
Increase.	372,265	51,046	715,201	5,515

By reducing the wheat to flour, the quantity of the latter left at tide water this year, compared with the corresponding period of last year, shows an increase of 571,246 bbls. of flour.

The amount received for tolls on all the New York state canals during the fourth week of June, is .....\$90,827 68  
Same period in 1850..... 83,706 66

Increase in 1851.....\$7,121 02

The aggregate amount received for tolls from the commencement of navigation to the 30th of June inclusive, is.....\$1,128,851 75  
Same period in 1850..... 926,486 66

Increase in 1851.....\$202,365 09

These figures show a very flattering result for the first two and a half months of canal navigation,



and the prospects for the first week in July are that it will show a corresponding increase in tolls.

The Bids for the Wilmington and Manchester Bonds (\$300,000) were opened on the 10th inst., at the office of Winslow, Lauier & Co. The number of bonds bid for was \$521,000. The following were the successful bidders:—

	Bonds.	Price.
E. W. Charles, Darlington, S. C.	5	100
H. Nutt, Wilmington, N. C.	5	100
N. N. Nixon, Wilmington, N. C.	5	100
Alfred Smith, Whitesville, N. C.	10	100
Eli Gregg, Mars Bluff, S. C.	15	100
G. J. W. McCall, Darlington, S. C.	13	100
James S. Gibson, Darlington S. C.	10	98
R. Rogers, Black Creek, S. C.	8	96½
John A. Rogers, Black Creek, S. C.	3	96½
D. Rees Gregg, Mars Bluff, S. C.	2	95½
Jas. Maultsly, Whitesville, N. C.	10	95
Gilbert Potter, Wilmington, N. C.	5	94
Edward Kidder, do.	5	94
Jno. A. Taylor, do.	5	94
H. M. Baldwin, Whitesville, N. C.	3	94
Calvin Haynes, do.	3	92
De Rossett & Brown, Wilmington, N. C.	5	92
Edmund Clark, Cleveland, Ohio.	10	91½
Corcoran & Riggs, Washington	25	90-65
" " "	25	90-45
" " "	25	90-20
" " "	20	90
Chubb, Schenck & Co., "	10	90-55
" " "	10	90-05
E. S. Whelen & Co., Phila.	5	90-26
Thos. McKenzie, New York	2	90-05
G. I. W. McCall, Darlington, S. C.	12	90-00
A. T. Clark, Tarboro, N. C.	1	90-00
Allen McFarlan, Cheraw, S. C.	20	90-00
M. J. McMall, Darlington, S. C.	2	90-00
Jno. F. Ervin, do.	5	90-00
Wm. Evans, Marion Ct. House, S. C.	5	90-00
J. A. Maltby, Whitesville, N. C.	4	90-00
Jno. Dawson, Wilmington, N. C.	5	90-00
R. Wooten, do.	2	90-00

In all.....300

In addition to the above there were 221 bonds bid for, 211 at from 80 to 90, mostly at near latter price, and 10 at under 80.

The shipments of specie for the week ending today, are as follows:—

[Per Niagara, July 3.]

American gold.....	\$916,000
English gold and silver.....	49,405

Total.....\$965,405

[Per Arctic.]

American gold.....	\$979,000
English gold and silver.....	8,890

Total.....\$987,890

Grand total.....\$2,053,295

The following are the receipts of the New York and Harlem railroad company for the month ending July, 1851.....\$54,992 08

— 1850.....45,855 41

Increase.....\$9,135 67

For six months ending July, 1851.....\$283,866 02

" " " " 1850.....223,201 62

Increase.....60,664 40

**Norwich and Worcester Railroad.**—The receipts for June on the Norwich and Worcester railroad, were:—

	1850.	1851.
Through travel.....	\$1,456 04	\$1,596 51
Local Travel.....	7,791 68	7,756 09
Freight.....	9,426 64	11,284 62
Mails, Expresses, &c.	980 25	980 25

\$19,654 61 \$21,617 47

Showing an excess this year of \$1,962 86, equal to nearly 11 per cent. The through travel shows a small gain, while the receipts from freight give a large advance on those of last year.

The following are memoranda of the business upon the Baltimore and Ohio railroad, for the month of June, 1851:—

	For Passengers.	For Freight.
Main Stem.....	\$25,086 78	\$85,768 19
Washington Branch.....	17,906 02	5,875 54
	\$42,992 80	\$91,643 73

Making an aggregate of \$110,854 97 on the Main Stem, and \$23,781 56 on the Washington Branch—the total being \$134,636 53.

The above, compared with the corresponding month of last year, shows a decrease of \$4,811 44, being \$1,397 38 on the Main Stem, and \$3,414 06 on the Washington Branch. The falling off on the Washington Branch is attributed to the fact that Congress was in session in June, 1850, and on the Main Stem to a large amount of flour being held back, waiting higher prices.

#### SALES OF STOCK IN NEW YORK.

	July 10.	July 3.
	Sales.	Sales.
U. S '67 Loan.....	116½	116½
Erie R.R.....	84½	83½
Harlem R.R.....	73	74
Stonington.....	44½	44½
L.I. R.R.....	17	17½
Norwich & Wor....	57	60
Del. & Hudson.....	121½	121½
Reading.....	56½	57½
Morris Canal.....	16	16½
Erie income.....	97½	96½
" " Bonds.....	103	103½
Canton.....	67	70
Farmers Loan.....	69	69

#### SALES OF STOCKS IN BOSTON.

	July 9.	July 2.
Old Colony Railroad.....	68	67½
Boston and Maine R.R.....	103½	103½
Eastern Railroad.....	98	102
Fitchburg Railroad.....	110	109½
Michigan Central Railroad.....	103	103½
Northern Railroad.....	69½	70
Vermont Central Railroad.....	35½	36
Vermont and Mass. R.R.....	30½	30½
Western Railroad.....	102½	103½
Ogdensburg Railroad.....	35½	37½
Rutland Railroad.....	55	53
Boston and Worcester Railroad.....	103½	103½
Rutland Railroad Bonds.....	97	97
Ogdensburg Railroad Bonds.....	97	98
Vermont Central R.R. Bonds.....	91½	91½
Boston and Providence R.R.....	90	89½
Philadelphia, Wilm'gton & Balt.....	29½	30
Concord R.R.....	55	54½

#### Illinois.

**Springfield and Bloomington Road.**—A preliminary survey of this route, from Springfield to the Sangamon river has been made. A most favorable point for crossing the river was found, besides being in the direct line. The engineer corps left Springfield on the 24th ult., to continue the survey from the river to Bloomington.

#### Hartford and Providence Railroad.

The negotiations which have been pending during the past few weeks for a union of the Providence and Plainfield railroad, and the Hartford and Willimantic railroad are terminated, and the parties have entered into a contract which will insure the completion of the road from Providence to Hartford immediately.

The **Eastern Railroad Company** have declared a dividend of 4 per cent payable on the 16th. The net income of the road for the year from all sources, after paying for running expenses, interest, &c., amounts to \$277,451, 83; from which two dividends of 4 per cent each have been declared \$237,400.

#### Compound Rail for Railroads.

We are glad to learn from various quarters that the subject of the use of the compound rail is attracting a great deal of attention, and that the proprietor, J. F. Winslow, Esq., of Troy, is engaged in filling large orders with American iron. All the experience of its use thus far gives entire satisfaction. It realises the great advantages predicated of it in the abstract, while at the same time the objections which are usually made to it, are shown not to exist. The compound rail is as strong as the ordinary pattern of equal weight. If such is the fact, then the saving in repairs alone over the old track, will in a very few years pay the first cost of the iron, to say nothing of increased speed, greater safety of passengers, etc., etc.

The above pattern is now in use upon the Utica and Schenectady, Hudson River, Erie, Reading, and some other roads; and has received the approbation of all the companies. The cost of "maintenance of way," is the moth that eats up the earnings of railroad companies; and any improvement which can lessen this expense, should receive the attention of railroad companies. The experiment of the use of the compound rail can be tried very satisfactorily on a small scale, and we can safely say that its success so far justifies every railroad company in making a trial to satisfy themselves.

#### Iron.

**200** Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to **NORMAN M. FINLAY,** Poughkeepsie, Dutchess county, N. Y. July 10, 1851.

#### Trautwine on R. R. Curves.

By **JOHN C. TRAUTWINE,** Civil Engineer, Philadelphia, Pa.

IN press, and will be published in a few days; accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by **Wm. Hamilton,** Actuary of the Franklin Institute, Philadelphia. Price \$1.

Also in press, and will be issued in a few weeks, "**Trautwine's Method of Calculating Excavation and Embankment.**"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidly, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, \$1. For sale by **Wm. Hamilton.**

June 28, 1851.

#### S. S. Keyser & Co., IRON WAREHOUSE,

Corner of South and Pratt Streets, BALTIMORE, MD.

Selling Agents for the Rough and Ready Bar Iron and Elk Boiler and Plue Iron Rolling Mills, Sarah and Taylor Furnaces, and Wrightsville Hollow Ware Foundry, and Dealers in Bar and Sheet Iron, and Cast, Sheer, German, Blister, Spring and Electroplated Steel, etc., etc.

**THE** Fourth Annual Exhibition of AMERICAN MANUFACTURES, by the MARYLAND INSTITUTE for the Promotion of the Mechanic Arts, will be opened in Baltimore on the 20th October, 1851.

The Exhibition will be held in the SPLENDID NEW HALL of the Institute, (fronting on Baltimore street) now being rapidly completed. Their edifice is centrally situated, chaste in its architecture, solid in its construction, and is by far the largest and most complete building in the United States, devoted to the Mechanic Arts. It may be added that this building is 355 feet long by 60 in breadth, with an average height of 68 feet, containing some twelve apartments, the largest of which is 255 feet by 60, and that the cost will be over \$70,000.

To this Exhibition, the Managers ask the attention of all engaged in industrial pursuits throughout the country, and cordially invite them to contribute specimens of their best productions for public inspection, and to compete for the prizes offered by the Institute. These prizes consist of GOLD and SILVER MEDALS, DIPLOMAS, etc., which were last year distributed as follows:—Gold Medals, 16; Silver ditto, 90; Diplomas, 60; besides 85 articles of Jewelry, etc., to ladies. Fair play will be scrupulously observed towards all, and every facility of Steam power, shafting, fixture, labor, &c., &c., will be amply provided free of expense. The machinery will be under a special superintendent, and a fine display of it is looked for. The last exhibition of the Institute was visited by more than 40,000 persons, and with their vastly improved accommodations and alterations, this number will be doubled at the coming display, embracing many Virginians, Pennsylvanians, and other strangers from the South and West.

Joshua Vansant, President.  
Ed. Needles, } Vice Presidents.  
F. A. Fisher, }  
Samuel Sands, Rec. Sec'y.  
Wm. Prescott Smith, Cor. Sec.  
F. J. Clare, Treasurer.

#### BOARD OF MANAGERS.

Ross Winans,	Simeon Alden,
P. S. Benson,	J. T. Watson,
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Thomas Stowe,	Wm. A. Boyd,
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A. Flannigain,	C. W. Bentley,
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Wm. H. Keighler,	John F. Mereditt,
Richard Edwards, Jr.,	W. Abrahams,
Wm. Bayley,	Thos. Trimble,
R. Eareskson,	Chas. Suter.

(The last nine in *Italics* are the Committee on Exhibition.)

The Hall will be opened for the reception of goods on MONDAY, 13th October; on the next Monday, 20th, at 7 P. M., the Exhibition will be formally opened to the public, and will positively close on Wednesday, 19th November. Articles for competition must be in the Hall by Thursday night, Oct. 16, unless delayed in shipment after starting in ample time.

Those who intend depositing, will give the Committee or the Agent, notice as early as possible, stating the nature of the goods, and probable amount of room required, to exhibit them to advantage.

Circulars, containing a view of the new Hall and the full regulations of the Committee, with special information, if required, may be had promptly, by addressing the undersigned, or the Institute's Agent, J. S. Selby, Baltimore, post-paid.

ADAM DENMEAD,

Chairman Com. on Exhibition for 1851.

#### SUPERIOR BLACK WRITING & COPYING INK.

##### Jones' Empire Ink.

87 Nassau st., Sun Building, New York city.

Net prices to the trade—

Quarts, per dozen,	\$1 50	6 oz. per dozen,	\$0 50
Pints,	1 00	4 " "	0 37
8 ounces,	0 62	2 " "	0 25

On draught per Gallon, 20 cents.

This is the best Ink manufactured, it flows freely, is a good copying ink, and will not mould, corrode, precipitate or decay. Orders for export, or home consumption, carefully and promptly attended to by  
21st  
THEODORE LENT.

#### Notice to Contractors.

Engineers' Office, E. T. & V. R. R. Company, }  
Greenville, E. T., June 5th, 1851.

PROPOSALS will be received until the 1st day of October next, for the Grading and Masonry of that part of the E. T. & V. Railroad between the Eastern terminus of said road at King's Meadow, and Rheatown, in Greene County, a distance of about forty-seven miles. A large amount of very heavy work, both in Grading as well as Masonry, will be found on this division, offering strong inducements to able Contractors.

Maps, Profiles, and Specifications can be seen at this Office, on and after the 20th of July next. The Company reserve the right to reject all, or any proposals that they deem unsatisfactory.

Proposals should be directed to the Treasurer and Secretary of the E. T. & V. Railroad Company, Jonesborough, E. T.

LLOYD TILGHMAN,  
Chief Engineer.

#### Lovegrove's Patent Cast Iron Water and Gas Pipes.

THE Subscriber, the Inventor and Patentee of the Centrifugal mode of giving form to metallic substances while in a molten state, is preparing to make Cast Iron Water and Gas Pipes, of any dimensions, at prices much lower than they can be made in the old manner, and the pipes warranted to stand a pressure of three hundred pounds to the square inch, and to be soft enough to drill. Steam Engines and all kinds of machinery. Cast Iron Doors and Frames, and Mill Castings of every description, made to order.

THOMAS J. LOVEGROVE,  
Machinist and Founder,

West Falls Avenue, below Pratt st., Baltimore.

#### Superintendent of a Railroad.

THE Post of Superintendent of a Railroad is wanted by a middle aged man, who can give satisfactory evidence of his capacity, integrity and qualifications for such a situation. Letters addressed to A. B., care of the Editor of the Railroad Journal, New York, (to whom the above would refer), will receive immediate attention.

New York, June 11, 1851.

#### Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y. or, MOORE HARDAWAY, Richmond, Va.  
March 6, 1850.

#### Railway Iron.

3000 TONS, 50, 57, and 60 lb. Rails, made of best English Iron and under particular specifications.

Also: Rails imported on commission or at a fixed price, delivered at a port in England, or at any port in the United States. Apply to  
DAVIS, BROOKS & CO.,

June 5, 1851. 23 Beaver st., New York.

#### Wheel, Forge and Foundry Iron.

LOCUST GROVE Wheel Iron of great strength and superior chilling property.

Balt. Charcoal Forge Iron, from Patuxent, Curtis Creek and Gunpowder furnaces.

Elkridge Foundry Iron, of superior strength and softness. Anthracite and Charcoal Iron from Pennsylvania and Virginia. Gas and Water Pipes, Lamp Posts from Elkridge furnace.

LEMMON & GLENN,  
5m9 62 Buchanan's Wharf, Baltimore.

#### To Railroad Companies.

##### SALISBURY REFINED IRON.

THE Undersigned, having enlarged and perfected his Works, is now prepared to furnish Locomotive Tire of a better quality than have heretofore been used. Railroad Companies who may wish it, will be furnished with a set for trial, not to be paid for until they are satisfied of their superior quality over any other. Also made at short notice, and in the best manner, Locomotive Cranks, Engine and Car Axles, and other Locomotive Forgings.

All work ordered from me will be made of Salisbury Iron, and done in the best manner.

Address HORATIO AMES,  
Falls Village, Conn.

May 1, 1851.

#### TO CONTRACTORS.

Engineer's Office, S. S. R. Road Co. }  
Petersburg, Va., May 27, 1851.

PROPOSALS will be received at the Engineer's office, South Side Railroad, at Petersburg, Va., until the 31st of July next, for the construction of Appomattox Bridge, to be erected near Farmville.

The Bridge will be about 3000 feet long and 80 feet high; to consist of a wooden superstructure resting on abutments and piers.

The piers will be of brick or stone, to be determined after receiving the proposals.

Good brick earth can be obtained near the site of the Bridge.

The proposals may be made for the structure complete, or for the various items of work and materials, viz.: Masonry, furnishing Bricks or Timber; workmanship of laying Bricks and workmanship of superstructure.

Security will be required for the fulfilments of the contracts, and it will be necessary that each proposal be accompanied with a letter from a responsible person or persons, stating that they will become security.

C. O. SANFORD,  
Ch. Engineer, S. Side R. Road.

#### Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,  
29 Central Wharf.

Boston, June 1, 1851.

#### Bowling Tire Bars.

40 Best Flange Bars	5 1/2 x 2 inches,	11 feet long.
40 "	5 1/2 x 2 "	7 feet 8 in. long.
40 " Flat "	6 x 2 "	11 feet long.
40 "	6 x 2 "	7 feet 8 in. long.

Now in store and for sale by

RAYMOND & FULLERTON,  
45 Cliff street.

#### To Railroad Companies, Machinists, Car Manufacturers, etc., etc.

##### CHARLES T. GILBERT,

NO. 80 BROAD ST., NEW YORK,

IS prepared to contract for furnishing at manufacturer's prices—

Railroad iron,  
Locomotive Engines,  
Passenger and Freight Cars,  
Car Wheels and Axles,  
Chairs and Spikes.

Orders are invited; and all inquiries in relation to any of the above articles will receive immediate attention.

#### JOHNSON, CAMMELL & Co's Celebrated Cast Steel,

AND  
ENGINEERING AND MACHINE FILES, which for quality and adaptation to mechanical uses, have been proved superior to any in the United States. Every description of square, octagon, flat and round cast steel, sheet, shovel and railway spring steel, best double and single shear steel, German steel, flat and square, goat stamps, etc. Saw and file steel, and steel to order for any purposes, manufactured at their Cyclops Steel Works Sheffield.

JOHNSON, CAMMELL & CO.,  
24 Cliff St., New York.

November 23 1849.

#### Car Wheel Iron.

100 Tons "Columbia" No. 2 Cold Blast Charcoal Iron.

300 Tons "Salisbury" No. 1, do. do.

For sale by CHARLES T. GILBERT,  
No. 80 Broad st.

New York, Sept. 21, 1850.

#### Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway iron, at any port in the United States, at fixed prices, and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.



**To Railroad Companies, etc.**

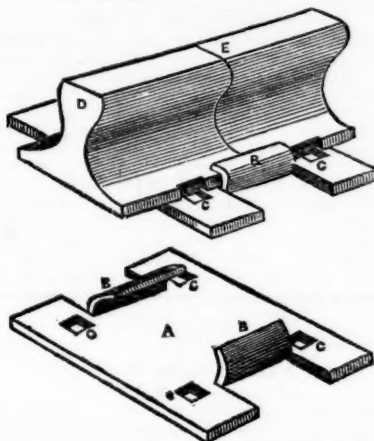
The undersigned has at last succeeded in constructing and securing by letters patent, a Spring Pad-lock which is secure, and cannot be knocked open with a stick, like other spring locks, and therefore particularly useful for locking Cars, and Switches, etc.

I also invite attention to an improved PATENT SPRING LOCK, for SLIDING Doors to Freight and Baggage Cars, now in use upon the Pennsylvania Central, Greenville and Columbia, S.C., Reading, Pa., and other Railroads.

Companies that are in want of a good Pad-lock, can have open samples sent them that they may examine and judge for themselves, by sending their address to

C. LIEBRICH,  
46 South 8th St. Philadelphia.

May 9, 1851.

**The American Railroad Chair Manufacturing Co.**

**ARE** prepared to make WROUGHT IRON RAIL ROAD CHAIRS, of various sizes, at short notice.

By use of the WROUGHT IRON CHAIR, the necessity of the wedge is entirely done away—the lips of the chair being set, by means of a sledge or hammer, close and firmly to the flange of the rail.

The less thickness of metal necessary in the Wrought Iron Chair gives much greater power and force to the spikes when driven—and consequently a much less liability to the spreading of the rails by reason of the spikes drawing or becoming bent.

The less weight necessary in the Wrought Iron Chair, will enable us to furnish them at a cost much below that of CAST IRON CHAIRS.

**DESCRIPTION OF THE ABOVE CUTS.**

Figure 1 is a perspective view of the rail secured in the chair, and fig. 2 is a perspective view of the chair itself. D, E, are sections of two rails placed together, and secured at the joint on the chair by the jaws B, B. The chair is bolted down by spikes C, C. In fig. 2, the chair is represented as made of a single block or plate A of wrought iron.

The chair is set in its proper place on the track, spiked down, and the ends of the two rails brought together within the jaws as represented in fig. 1.

For further information address,

N. C. TROWBRIDGE, Secretary,  
Poughkeepsie, N. Y.

June 1, 1851.

**Railroad Commission Agency.**

**THE** Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,  
75 Kilby st., Boston.

June 20, 1851.

**LOWMOOR**

AND

**U. S. BEST FINCH IRON.  
To Iron Merchants.**

**JOHN FINCH & SONS**, Iron Merchants, Liverpool, now are, and for more than twenty years past have been, sole Agents for the LOWMOOR IRON COMPANY, for the United States and Canada, for the sale of their well known Railway Tire Bars, and Axles, Piston Rods, Boiler Plates, Angle, Rivet, and all other kinds of Lowmoor Iron: also, sole Agents for the sale of the superior Staffordshire Iron stamped "FINCH CROWN" and "U. S. BEST FINCH;" and Merchants and Wholesale Dealers in all other kinds of British Iron.

We hereby inform our friends and the public that we have this day appointed Mr. WM. BAILEY LANG, of Boston, as our only representative to receive orders and to transact our general business in the United States.

For **JOHN FINCH & SONS**,  
**JOHN FINCH** Sen.

Boston, April 11, 1851.

LOWMOOR and other Bent, Welded and Blocked RAILWAY TIRES, ready for use, E. FINCH'S Patent Dovetailed and other kinds of WROUGHT IRON RAILWAY WHEELS, with, or without the finished Axles, for Locomotives and for Passenger and Merchandise Cars, also Wrought Iron Railway Chairs, Railway Spikes, etc.

To the Managers of Railways, Engineers and others: Gentlemen:—We, **FINCH & WILLEY**, Engineers, Liverpool, Manufacturers of the above articles, respectfully inform you that we have this day appointed Mr. WM. BAILEY LANG, of Boston, as our sole Agent for the sale of said articles, and the transaction of our business in the United States of America, and for whom we solicit your kind attention and patronage.

For **FINCH & WILLEY**,  
**JOHN FINCH**, Sen.

Boston, April 11, 1851.

Having accepted the above Agencies, I beg leave to solicit your orders, which shall at all times receive my prompt and careful attention. Please address all communications either to MESSRS. JOHN FINCH & SONS or MESSRS. FINCH & WILLEY, Liverpool; or to me, at my Steel Warehouse, No. 9 Liberty Square, Boston. Yours very respectfully,

**WM. BAILEY LANG.**

Boston, April 11, 1851.

The following are testimonials of the quality of **FINCH & WILLEY'S** WROUGHT IRON RAILWAY WHEELS from the Yorkshire and Lancashire Railway Co., one of the largest in Great Britain, and from the London and North Western Railway Co., the largest Railway Company in the world.

**LONDON AND NORTH WESTERN RAILWAY,**  
(Northern Division.)

**WAGON DEPARTMENT, ORDSALL LANE,**  
Manchester, January 4, 1851.

Gentlemen:—I have very great pleasure in bearing my testimony to the excellent quality of your Wrought Iron Railway Wheels.

This Company have many of them now in use on their lines, and during my experience, as their Superintendent, which is now upwards of 9 years standing, I have not known any of them to fail during that time.

I am, Gentlemen, yours, truly,

**OWEN OWENS.**

**MESSRS. FINCH & WILLEY,**  
Windsor Foundry.

**LANCASHIRE AND YORKSHIRE RAILWAY,**  
Wagon Department, Jan. 3, 1851.

**Messrs. Finch & Willey,**

Gentlemen: In reply to your request writing me to give my opinion of the 700 sets of Wrought Iron Wheels you furnished this company during the years 1847 and 1848, I have much pleasure in stating that we have not had a single instance of your Wheels failing in any respect, and I consider them equal if not superior to any Wheels we have on this line of railway. The Tires being LOWMOOR iron, 1 1/2 inch thick, I have no doubt they will run under ordinary goods' wagons 12 years without any repairs more than the tires turning up.

I am Gentlemen,

Yours, truly, **WM. EMMETT.**

**NOTE.**—4 Wheels and 2 Axles are one set, consequently this order contained 2800 WHEELS and 1400 AXLES; value over \$100,000.

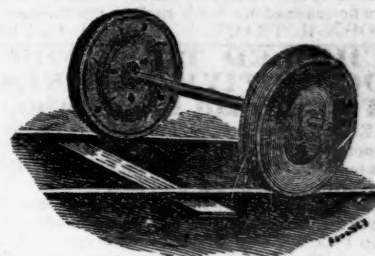
**Boston Locomotive Works,**

—Late Hinkley & Drury—

No. 380 Harrison Avenue,  
BOSTON.

Locomotive and Stationary Steam Engines; Boilers; Iron, Brass, Copper and Composition Castings; Coppersmith's Work, and all kinds of Railroad Machinery furnished at short notice.

ALSO

**Van Kuran's Improved Railroad Wheel,**

Patented May 1, 1849. Manufactured under the personal superintendence of the Patentee, as above.

Orders for any quantity of wheels executed with dispatch, and wheels and axles fitted in the very best manner and at the lowest rates. Address

**DANIEL F. CHILD**, Treasurer, Boston.

**Providence Tool Co.,**

MANUFACTURERS OF

Plane Irons, Tooth Irons, Soft Moulding and Rabbet Irons, Cornice Irons, Plow Bits, and Planing Machine Knives:

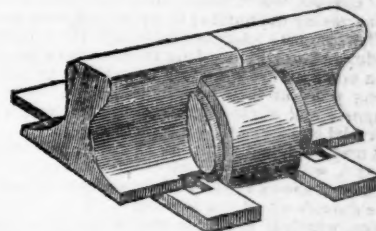
**NUTS, WASHERS AND BOLTS.**

—ALSO—

**PLATE HINGES AND PICK AXES.**

They are prepared to execute orders for all descriptions of Cold Punching and Job Work.

**WM. FIELD**, Agent. **RUFUS WATERMAN**, Treas.  
**PROVIDENCE, R. I.**

**Railroad Iron,  
SPIKES, AND  
WROUGHT IRON CHAIRS.**

**THE** Undersigned, Agent for Manufacturers, is authorized to contract for Welsh Railroad Iron of the best quality, and deliverable at any port on favorable terms, also Spikes and Wrought Iron Chairs, made from the best iron, and of any pattern and weight. The new Wrought Iron Chair, with the introduction of a "Key," as per the annexed plan, will be found a great improvement on the old pattern.



Boiler Plates of superior quality, perfect regularity in the squaring and thickness, and made with great care.

Samples can be seen at this office, No. 20 Beaver St.  
**CHARLES ILLIUS**

## RAILROAD CAR MANUFACTORY

TRACY & FALES,  
GROVE WORKS, HARTFORD, CONN.  
Passage, Freight and all descriptions of  
**RAILROAD CARS,**

AS WELL AS  
**LOCOMOTIVE TENDERS,**  
Made to order promptly.

The above is the Largest Car Factory in the Union. In quality of Material, and in Workmanship, Beauty and Good Taste, as well as Strength and Durability, we are determined our work shall be unsurpassed.  
JOHN R. TRACY. THOS. J. FALES.

**CHILLED TIRES FOR  
LOCOMOTIVE ENGINES.  
To Railroad Companies.**

THE Undersigned, Assignee of Letters Patent, respectfully invites the attention of Railroad Companies to the CHILLED TIRES for LOCOMOTIVE ENGINES, which he offers for sale.

These Tires were first introduced by Messrs. Perkins & McMahon, upon the Baltimore and Ohio Railroad, in 1843, where, after a long and severe trial, they were generally adopted, on both passenger and freight engines, and now have entirely superseded Wrought Tires on that road, on which are many engines of the heaviest class, which ascend grades of *eighty-five feet per mile*, taking with them *one hundred and twelve tons*, exclusive of cars. This performance shows in some measure the adhesive character and strength of the Tire.

During a service of seven years, these Tires have very much exceeded in durability those of wrought iron, while their first cost, and expense of repairs, is more than *fifty per cent. less*. They also retain more equally their diameter and proper form of tread, which is a point of much value in engines with coupled wheels.

It is believed these Tires are peculiarly well adapted to freight engines, as the objection to coupling the wheels of locomotives is the *increased friction*, arising principally from the *unequal wear* of wrought tires; and hence most of the freight engines where wrought tires are used, have but *four wheels as drivers*, with frequently a weight of *sixteen tons*, or more, upon them, which may be of no disadvantage to the engine, although its effect upon the track is like a car with *sixteen tons* upon four wheels, and it is presumed no one would permit cars so heavily loaded to pass over their road.

As Chilled Tires wear more *uniformly* than those of wrought iron, there can be no doubt when these are used, that the weight necessary for adhesion may be distributed upon more *driving wheels*, without any material disadvantage to the engine, and thus placing *less weight* upon a *single point*, would relieve the track, and secure, to a great extent, the object sought to be gained by the plan so frequently proposed, of using *light engines*, which would bring with it the necessity of *increasing* the number of trains and train hands.

The complete success of Chilled Tires upon the Baltimore and Ohio road for the last seven years, and upon other roads for a more subsequent period, is a strong proof of their *practical character*, while their *cheapness and durability*, it is believed, recommend their trial by every railroad company.

It may be thought by some that the *whole wheel* for strength, would be preferable to wheels with tires, but experience shows the latter to be a much *stronger and more durable* wheel, on account of its freedom from *tension*, which is never the case with a *whole wheel*. That TENSION has much to do with the breaking of wheels and tires, may be inferred from the fact, that a set of *chilled tires*, five feet diameter, on a first class passenger engine, have been in constant service during the past winter, on one of our Eastern roads, and have withstood the severities of the season, where *whole wheels and wrought tires* have broken. And it may be proper to remark, that wherever chilled tires have been introduced, *whole wheels as drivers* are invariably abandoned, they being far more expensive to maintain, as there is a *crank* to form as often as a wheel is renewed, which is *not* the case on the renewal of a tire.

The peculiar manner of *fastening* these tires to the wheel without *shrink*, applies equally well to wrought tires, and is of much importance where they are used, as it secures them against the TENSION or STRAIN they receive by the present plan of *shrinking* them to the wheels, which undoubtedly is the cause of wrought tires breaking so frequently, particularly in cold weather, which produces a greater contraction of the tire, thereby increasing the strain. This plan makes the tire perfectly secure upon the wheel, and is attended with *less expense*, as will be seen by the following testimonials, which are respectfully submitted.

Lowell, March. 1851.

L. B. TYNG,

## TESTIMONIALS.

Baltimore and Ohio R. R. Office, }  
Jan. 2, 1850.

Mr. L. B. TYNG, Lowell, Mass.—Sir: Your favor of the 26th ult., is before me, asking my opinion of the Chilled Cast Iron Tires, of Messrs. Perkins & McMahon, patentees. I do not hesitate to speak favorably of them, nor to say that I would give them the preference over wrought iron tires, whenever the adhesive tenacity of the latter to the rails is not all called for, there being somewhat less adhesion to the chilled wheel.

This can, however, scarcely be called a practical point, as nearly all of the Passenger Engines now in use have a surplus of adhesion, and nearly all Freight Engines being provided with the sand box, for emergencies arising from sharp curves, heavy grades or wet rails.

The Chilled Tire is very much cheaper in first cost, will last longer, and offers a facility for putting it on the wheel, rendering comparison with the wrought iron tire an absurdity—it not being necessary even to take the wheels from the machine for the purpose. Many of them are in successful use on this road, and I consider its curves and other peculiarities the most severe of all existing tests. One set of five feet in diameter, has run 50,000 miles under one of our Passenger Engines, and will to all appearance, run as many more; and, in the mean time, they have not cost a dollar for repairs or adjustment.

It may be suggested that they might not stand a Northern frost. This is possible; but I believe otherwise, as the weather here is occasionally as severe as in Boston, and if I had charge of a northern road, after the experience I have had here, I would make their trial one of my very first acts.

Respectfully your Ob't Serv't,  
WM. PARKER, General Supt., etc.

January 29, 1851.

Philadelphia, Wilm. and Balt. R. R. Office, }  
Wilmington, Del.

Mr. L. B. TYNG—Sir: We have used the solid Cast Iron Chilled Wheel, and Cast Iron Chilled Tire, for engine drivers, on this road since 1842. When wrought iron tires under new engines, purchased from time to time, wear out, I invariably replace them with the Chilled Tire of Messrs. Perkins & McMahon, patentees.

These Tires will last, on the average, three times as long as wrought tires; seldom requiring renewals under three years, and lasting much longer usually. We have a set which has been in constant use for five years, and still in fair order. The adhesion supplied by the Chilled Tires, I find in practice with engines of the same model and weight, to be equal to that given by wrought tires. This is certainly a fact, though not an acknowledged one, in general. Those who think otherwise, will in time change their opinions.

I am of opinion that the Chilled Tire is as safe as the wrought, at any temperature. In eight years use, we have broken but one tire out of more than fifty, and that by a violent concussion on the occasion of a run off.

The use of the Chilled Tire, and the ease and rapidity with which it may be replaced, would certainly enable a road to do the same amount of work with fewer engines—since but little time would be lost in laying up an engine for new tires, or for turning down old ones, as must be done when wrought tires are used.

I am yours respectfully,

I. R. TRIMBLE,  
Engineer and General Supt.

Office Eastern R. R., Salem, Dec. 23, 1850.

L. B. TYNG, Esq.—Sir: Your favor of Nov. 30th, inquiring respecting the Chilled Cast Iron Tires, came duly to hand, and in answer, I will say, that this road have in use one set cast and fitted to the wheel, by Messrs. Bush & Lobdell, upon a twenty ton first class Passenger Engine, which has run in eight months, 26,639 miles, and to all appearance, are about as good as when they first commenced running.

In regard to the comparative expense of the cast or wrought iron tires, I do not hesitate to say that the difference would be vastly in favor of the former.

I have ordered a second set, and they will be put on to the engine immediately. Respectfully,

JOHN KINSMAN, Supt. E. R. R.

Chilled Tires for the various sized wheels, or wheels with either chilled or wrought tires fitted up upon this plan, may be had of the following persons:

ALDRICH, TYNG & Co, Lowell, Mass.  
SMITH & PERKINS, Alexandria, Va.

Rights for using Tires upon the above plan, may be had on reasonable terms, of L. B. TYNG, Lowell, and at N. York.

## Railroad Iron.

THE UNDERSIGNED, HAVING made arrangements abroad, are prepared to contract for the delivery of Foreign rails, of approved brands upon the most favorable terms.

They will also make contracts for American rails, made at their Trenton works, from Andover Iron, in whole or in part, as may be agreed upon.

They are prepared to furnish Telegraph, Spring and Market Wire; Braziers and Wire Rods; Rivets and Merchant Bars to order, all made exclusively from Andover Iron. The attention of parties who require iron of the very best quality for special purposes, is respectfully invited.

COOPER & HEWITT,  
17 Burling Slip, New York.

February 15, 1850.

## Railroad Lanterns.

COPPER and Iron Lanterns for Railroad Engines, fitted with heavy silver plated Parabolic Reflectors of the most approved construction, and Solar Argand Lamps; manufactured by

HENRY N. HOOPER & CO.,  
No. 24 Commercial St. Boston.

August, 16, 1849.

6m33

## Railroad Iron.

THE UNDERSIGNED ARE PREPARED TO contract for the delivery of English Railroad Iron of favorite brands, during the Spring. They also receive orders for the importation of Pig, Bar, Sheet, etc. Iron.

THOMAS B. SANDS & CO.,  
73 New street,  
New York.

February 3, 1849.

## Railroad Spikes.

THE subscribers are prepared to make and execute contracts for Railroad Spikes of a superior quality, manufactured by the New Jersey Iron Company, at Boonton.

DUDLEY B. FULLER & CO.,  
139 Greenwich st. corner of Cedar.

## ENGINEERS.

## Atkinson, T. C.,

Mining and Civil Engineer,  
Orange and Alexandria Railroad, Alexandria, Va.

## Clement, Wm. H.,

Little Miami Railroad, Cincinnati, Ohio.

## Cozzens, W. H.,

Engineer and Surveyor, St. Louis, Mo.

## Alfred W. Craven,

Chief Engineer Croton Aqueduct, New York.

## C. Floyd-Jones,

Central Railroad, Decatur, Illinois.

## Gay, Edward F.,

Columbia and Philadelphia Railroad, Philadelphia Pa.

## Gilbert, Wm. B.,

Rutland and Burlington Railroad, Rutland, Vt.

## Gzowski, Mr.,

St. Lawrence & Atlantic Railroad, Montreal, Canada.

## Grant, James H.,

Nashville and Chattanooga R. R., Nashville, Tenn.

## S. W. Hill,

Mining Engineer and Surveyor, Eagle River,  
Lake Superior.

## Holcomb, F. P.

Southwestern Railroad, Macon, Ga.

## Latrobe, B. H.,

Baltimore and Ohio Railroad, Baltimore, Md.

## Miller, J. F.,

Buffalo and Conhocton Valley Railroad, Bath, N. Y.

## Morris, Elwood,

Engineer, Chartiers Co., Pittsburgh, Penn.

## Nott, Samuel,

Lawrence and Manchester Railroad, Boston,

## Osborne, Richard B.,

Cattawissa, Williamsport and Erie R. R., Tamaqua.

## Prichard, M. B.,

East Tennessee and Georgia R. R., Cleveland, Tenn.



**W. Milnor Roberts,**

Bellevue and Indiana Railroad, Marion, Ohio.

**Shanly, Walter,**Chief Engineer Bytown and Prescott Railway,  
Prescott, Canada.**Roberts, Solomon W.,**

Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

**Sanford, C. O.,**

South Side Railroad, Virginia.

**Schlatter, Charles L.,**

Northern Railroad (Ogdensburg), Malone, N. Y.

**Steele, J. Dutton,**

Pottstown, Pa.

**Trautwine, John C.,**

Civil Engineer and Architect, Philadelphia.

**Tinkham, A. W.,**

United States Port, Bucksport, Me.

**Troost, Lewis,**

Alabama and Tennessee Railroad, Selma, Ala.

**Whipple, S.,**

Civil Engineer and Bridge Builder, Utica, N. Y.

**HOTELS.****DAVIS'S****ALHAMBRA HALL,**No. 136 Pratt street,  
BALTIMORE.**Exchange Hotel,**Adjoining Eastern Railroad Depot,  
BUFFALO, N. Y.BY.....**FISK & SPERRY,**  
Late of Delevan House, Albany.**MANSION,**Corner of Maine and Exchange Streets,  
**P. DORSHIMER.** BUFFALO.**Barnum's City Hotel,**

MONUMENT SQUARE, BALTIMORE.

This Extensive Establishment, erected expressly for a Hotel, with every regard to comfort and convenience, is situated in the centre and most fashionable part of the city, and but a few minutes' walk from the Railroad Depots and Steamboat Landings.

The House has lately undergone a thorough repair, embracing many valuable improvements, and will accommodate 250 Guests. **BARNUM & CO.****American Hotel,**Pratt street, opposite the Railroad Depot,  
BALTIMORE.**HENRY M. SMITH**.....Proprietor.  
Late of the Exchange & St. Charles Hotels, Pittsburg**Washington Hotel,**BY **JOHN GILMAN,**

\$1 Per Day.

No. 206 Pratt street, (near the Depot),  
BALTIMORE.**GUY'S****United States Hotel,**(Opposite Pratt street Railroad Depot),  
BALTIMORE.**JOHN GUY.** **WILLIAM GUY.****DUNLAP'S HOTEL,**

On the European Plan,

**NO. 135 FULTON STREET,**Between Broadway and Nassau St.,  
NEW YORK.**JONES' HOTEL,****NO. 152 CHESTNUT STREET,**  
PHILADELPHIA.**BAIDERS & WEST,**.....Proprietors.**Fountain Hotel,****LIGHT STREET, BALTIMORE,****THURSTON**.....Proprietor.**BUSINESS CARDS.****Walter R. Johnson,****CIVIL AND MINING ENGINEER AND AT-**  
torney for Patents. Office and Laboratory, F St.,  
opposite the Patent office, Washington, D. C.**Lithography.****JOHN P. HALL & CO.,**

161 Main st., Buffalo, (Commercial Advertiser Build.)

Are prepared to execute all kinds of Lithography in good style and at reasonable rates. Particular attention will be paid to Engraving Railroad Maps, Engineer's Plans and drafts, etc., and orders in this line are respectfully solicited.

**Cumberland, (Md.) Coals for Steaming, etc.****ORDERS RECEIVED FOR AND FILLED**  
by **J. COWLES, 27 Wall St., N. Y.****J. & L. Tuckerman,****IRON COMMISSION MERCHANTS,**

AND MANUFACTURERS OF

**ULSTER BAR & POUGHKEEPSIE PIG IRON,**  
69 WEST STREET,  
NEW YORK**Henry I. Ibbotson,****IMPORTER of Sheffield and Birmingham Goods.**  
Also, Agent for the Manufacture of Telegraph Wire.  
218 PEARL ST., NEW YORK.**Charles T. Jackson, M. D.,****STATE ASSAYER,** late Geologist to Maine, Rhode Island, New Hampshire, and the United States, offers his services to his friends and the public in making any Chemical, Mineralogical or Geological researches that may be required for the improvement of Agriculture and the Manufacturing Arts. Particular attention will be paid to the exploration of mines and to assaying of ores of the metals.State Assayer's office, 31 Somerset st.  
Boston Sept. 3, 1850.**STEEL AND FILES.****R. S. Stenton,**

20 CLIFF STREET, NEW YORK,

AGENT FOR

**J. & RILEY CARR,****BAILEY-LANE WORKS, SHEFFIELD,**  
Manufacturers of Cast, Shear, German, Blister, and**Spring Steel,**

Of all descriptions, Warranted Good.

**FILES.**

Manufacturers of Machinists' Warranted Best Cast Steel Files, expressly for working upon Iron and Steel, made very heavy for recutting.

A full Stock of Steel and Files at all times on hand. 6m4

**Dudley B. Fuller & Co.,****IRON COMMISSION MERCHANTS,****No. 139 GREENWICH STREET,**  
NEW YORK.**Manning & Lee,****GENERAL COMMISSION MERCHANTS,****NO. 51 EXCHANGE PLACE,**

BALTIMORE.

Agents for Avalon Railroad Iron and Nail Works, Maryland Mining Company's Cumberland Coal 'CED'—Potomac and other good brands of Pig Iron.

**Samuel Kimber & Co.,****COMMISSION MERCHANTS****WILLOW ST. WHARVES, PHILADELPHIA.****AGENTS for the sale of Charcoal and Anthracite**  
A Pig Iron, Hammered Railroad Car and Locomotive Axles, Force Pumps of the most approved construction for Railroad Water Stations and Hydraulic Rams, etc., etc.  
July, 27, 1849.**James Herron, Civil Engineer,****OF THE UNITED STATES NAVY YARD,**  
**PENSACOLA, FLORIDA,**

PATENTEE OF THE

**HERRON RAILWAY TRACK.**

Models of this Track, on the most improved plans, may be seen at the Engineer's office of the New York and Erie Railroad.

**PLUSHES**

FOR

**Railway Cars & Omnibuses.****F. S. & S. A. MARTINE,**

112 WILLIAM ST., NEAR JOHN.

ARE now receiving a large and complete assortment of Plain and Figured **PLUSHES**, of their own importation, which will be sold at the lowest market price, viz: Crimson, Maroon, Scarlet, Green, Blue, Purple, etc.**ALSO—CURLED HAIR**, the best manufactured in market.**Manufacture of Patent Wire ROPE AND CABLES,**For Inclined Planes, Suspension Bridges, Standing Rigging, Mines, Cranes, Derrick, Tillers, &c., by  
**JOHN A. ROEBLING, Civil Engineer,**  
**TRENTON, N. J.****FORGING.****Ranstead, Dearborn & Co.,**

MANUFACTURERS OF

**LOCOMOTIVE CRANKS AND CAR AXLES,**

ALSO

**WROUGHT IRON SHAFTING,**And All Kinds of Hammered Shapes.  
Office 25 Foster's Wharf, Boston.**Samuel D. Willmott,****MERCHANT, AND MANUFACTURER OF**  
**CAST STEEL WARRANTED SAWS,**

—AND FILES—

IMPORTER OF THE

**GENUINE WICKESLY GRINDSTONES**  
**NO. 8 LIBERTY STREET,**  
NEW YORK.**Railroad Instruments.****THEODOLITES, TRANSIT COMPASSES,**  
and Levels, with Fraunhofer's Munich Glasses, Surveyor's Compasses, Chains, Drawing Instruments, Barometers, etc., all of the best quality and workmanship, for sale at unusually low prices, by  
**E. & G. W. BLUNT,**No. 179 Water St., cor. Burling Slip.  
New York, May 19, 1849.**Knox & Shain,**

MANUFACTURERS OF

**LEVELS, TRANSITS AND SURVEYING**  
**COMPASSES.**No 72 Dock st. first door south of Walnut, west side,  
**PHILADELPHIA.****IRON.****Iron.**

Pig Iron, Anthracite and Charcoal; Boiler and Flue Iron, Spring and Blistered Steel, Nail Rods, Best Refined Bar Iron, Railroad Iron, Car Axles, Nails, Stove Castings, Cast Iron Pipes of all sizes, Railway Chairs of approved patterns for sale by

**COLEMAN, KELTON & CAMPBELL,**  
109 N. Water St., Philadelphia.**Iron Store.****THE** Subscribers, having the selling agency of the following named Rolling Mills, viz: Norristown, Rough and Ready, Kensington, Triadelphia, Pottsgrove and Thorndale, can supply Railroad Companies, Merchants and others, at the wholesale mill prices for bars of all sizes, sheets cut to order as large as 58 in. diameter; Railroad Iron, domestic and foreign; Locomotive tire welded to given size; Chairs and Spikes; Iron for shafting, locomotive and general machinery purposes; Cast, Shear, Blister and Spring Steel; Boiler rivets; Copper; Pig iron, etc., etc.**MORRIS, JONES & CO.,**

Iron Merchants,

Schuylkill 7th and Market Sts., Philadelphia.  
August 16, 1849. 1v33**Glendon Refined Iron.**Round Iron, Band Iron, Hoop Iron,  
Square " Flat " Scroll "

Axles, Locomotive Tyres,

Manufactured at the Glendon Mills, East Boston, for sale by  
**GEORGE GARDNER & CO.,**5 Liberty Square, Boston, Mass.  
Sept. 15, 1849. 3m37

**Bowling Iron. Stamped B.O.**

Railway Tire Bars Rivet Iron  
Locomotive and other Axles Locomotive Frame do  
Boiler Plates Bars,  
and every other description of this superior Iron.

The subscribers, agents for the sale of Bowling Iron, are prepared to execute orders for importation, especially for railway and machinery uses, with despatch from the manufacturers.

RAYMOND & FULLERTON, 45 Cliff st.

**Ibbotson, Brothers & Co's  
CELEBRATED CAST STEEL**

AND

Best Cast Steel Royal Improved Files, well known as better adapted for Engineers' and Machinists' purposes than any now in use in the United States.

Every description of Square, Octagon, Flat and Round Cast Steel, Sheet, Shovel and Railway Spring Steel, etc., and Steel to order for any purposes—manufactured at their works in Sheffield—and universally known by the old stamp "Globe."

HENRY I. IBBOTSON, Agent,  
218 Pearl st., New York.

**Smith & Tyson,,  
IRON COMMISSION MERCHANTS,  
BALTIMORE.**

**REFINED** Juniata Charcoal Billet Iron for Wire. Do. for Bridging, of great strength.  
**Flat Rock**, Boiler and Flue Iron, rolled to pattern.  
**Elba**, Wheel Iron of great strength and superior chilling properties. **Elba** Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

**WILLIAM JESSOP & SONS'  
CELEBRATED CAST-STEEL.**

The subscribers have on hand, and are constantly receiving from their manufactory,

**PARK WORKS, SHEFFIELD,**

Double Refined Cast Steel—square, flat and octagon.  
Best warranted Cast Steel—square, flat and octagon.  
Best double and single Shear Steel—warranted.  
Machinery Steel—round.

Best and 2d. gy. Sheet Steel—for saws and other purposes.

German Steel—flat and square, "W. I. & S." "Eagle" and "Goat" stamps.

Genuine "Sykes," L Blister Steel.  
Best English Blister Steel, etc., etc., etc.

All of which are offered for sale on the most favorable terms by

WM. JESSOP & SONS,  
91 John street, New York.

Also by their Agents—

Curtis & Hand, 47 Commerce street, Philadelphia.  
Alex'r Fullerton & Co., 119 Milk street, Boston.

Stickney & Beatty, South Charles street, Baltimore.  
May 6, 1848.

**Railroad Iron.**

B. O. Railway Tires, Railway Wheels,  
Scotch Pig Iron, Tin Plates and Banca Tin,  
Muntz's Patent Metal Sheathing,  
Baltimore Copper.

Contracts for Rail's made on behalf of the manufacturers, for delivery at any ports in the United States, at fixed prices.

Bowling Tires and Tire Bars and Scotch Pigs imported to order.

Muntz's Ship-sheathing, and a general stock of Tin Plates and Banca Tin in store, and for sale by  
RAYMOND & FULLERTON, 45 Cliff st.

**IRONDALE PIG METAL, MANUFACTURED**  
and for sale by the Bloomsburg Railroad Iron Co.  
LINDLEY FISHER, Treasurer.  
75 N. Water St., Philadelphia.

**Car Wheel Iron.**

**THE** celebrated cold blast "Conowingo" Pig Iron, for Railroad Wheels, Chilled Rolls, etc., for sale by  
E. PRATT & BROTHER,  
Baltimore, Md.

**Railroad Iron.**

**3,000** TONS C. L. MAKE 63½ lbs. per yard, now landing and to arrive.

Also contracts made for future delivery of above superior make English Iron.

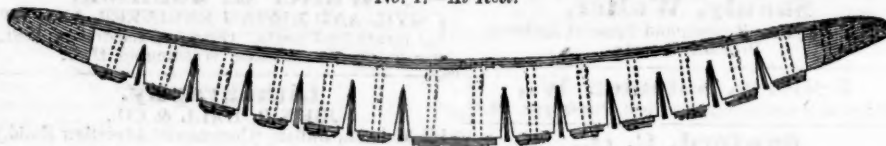
300 Tons Banks Best Iron, Round, Square and Flat.  
200 " English Bar " " " " "  
10 " 9-16 Square Iron for Railroad Spikes.

For sale in lots to suit purchasers by  
DAVID W WETMORE.

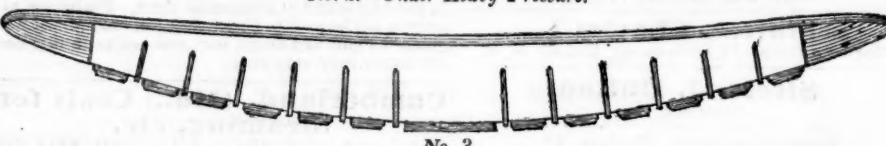
New York, March 26, 1850.

**PATENT EXCELSIOR SPRING  
for Railroad Cars, Locomotives, etc.**

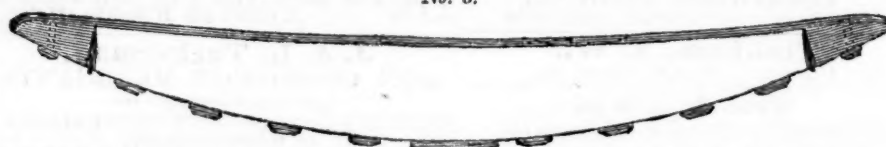
No. 1.—At Rest.



No. 2.—Under Heavy Pressure.



No. 3.



**THESE** Springs are composed of a Plate of Steel or five thousand pounds with the same ease. with Oak or Ash Wood, firmly riveted thereto, having saw kerfs in which are inserted flat plates of metal. The Spring is very powerful and yet sensitive. They are now being manufactured and sold by the Excelsior Spring Company, under a Patent granted on 20th May, 1851.

The above Drawing, No. 1, represents a side view of the Spring when it is at rest. No. 2, shows the same when under heavy pressure. No. 3, represents a Spring having only two plates instead of the usual number inserted in the wood.

This is undoubtedly the best Spring of the day—it is very simple—easy of application—light—cannot get out of order—and it is without any exception the most adjustable spring now made—for it will spring fifty

The cost of the springs is very much less than that of any other.

The Excelsior Spring Co., determined that every spring shall be of the best quality, have established a Factory, where each spring is made directly under the eye of Mr. Bissell, the inventor—and before a spring is allowed to leave the factory it is subjected to a much severer test than it ever can be when at work. Each Spring is guaranteed to perform the required work.

Any person infringing on this patent will be prosecuted.

Office of EXCELSIOR SPRING COMPANY.  
33 Broadway, New York.

June 7, 1851.

**Railroad Spikes, Boiler Rivets, etc.**

**THE** Subscribers, Agents for the sale of James S. Spencer's, Jr., Railroad and Boat Spikes, Boiler Rivets, and Wrought Iron Chairs for Railroads, made at his Works near this city, will execute all orders with promptness, despatch, and of the best quality.

**ALSO IMPORTERS** of English refined and Merchant bar Iron; Extra refined Car and Locomotive Axles (from 3½ to 6½ inches in diameter); B. O. Locomotive Tire (welded by Baldwin). Also, supply Boiler and Flue Iron cut to pattern or otherwise.—Spring, Shear, and Cast Steel, etc., etc., etc.

T. & E. GEORGE.

Philadelphia, November 14, 1850.

**Railroad Iron.**

**THE** Undersigned, Agents for Manufacturers, are prepared to contract for the delivery of English, Welsh and Scotch Rails, of any pattern and weight, also for every description of English, Welsh, Scotch, and Swedish Iron, Railway Chairs and Spikes, Rivets, Bolts, Nuts, Washers, Chain Cables, Anchors, Tin Plates, German Spelter, Iron Castings, and every description of Machinery.

WILLIAM BIRD & CO.,

Iron and Tin Plate Merchants,  
44 Wall st., New York.

And at 5 Martin's Lane, City, London,  
and 140 Buchanan st. Glasgow.

July 27th, 1850.

**Railroad Iron.**

**THE** "Montour Iron Company" is prepared to execute orders for Rails of the usual patterns and weights, and of any required length not exceeding 30 feet per rail. Apply to

THOS. CHAMBERS, President,  
66 Broadway, N. Y.,

Or to the Agents,  
CHOUTEAU, MERLE & SANFORD,  
NO. 51 New st., New York.

September, 1850.

**Railroad Iron.**

**THE** Undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board at shipping port in England, or at port of discharge in the United States, Rails of superior quality, and of such weight or pattern as may be required.

VOSE, PERKINS & CO.,  
74 South St.

New York, June 1, 1851.

**Railroad Iron.**

**1650** Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by  
BOORMAN, JOHNSTON & CO.,  
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B. J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports of the United States.

**Tredegar Iron Works.**

**ROLLING MILL FOUNDRY AND MACHINE SHOPS.** The undersigned continues to manufacture at his Works in this city (from best charcoal metal) Bar Iron of every description, embracing—Rounds and Squares, from ½ to 5 inches diameter. Flats, from ½ to 7 inches, all thicknesses.

Bands and Scrolls, all sizes. Boiler plate and Plough Iron. Railroad and Locomotive Axles and Tires. Locomotive Frames, Spikes and Plates. Hoops, Ovals, Half Ovals, Half Rounds, Angle, T, L, and indeed every description of Iron usually manufactured, all of which he warrants to be equal to any made in this country. He also manufactures at his Foundry and Machine Shops all descriptions of Railroad Work, say, Locomotives, Railroad Wheels and Axles complete and ready for the road, Railroad Chairs, etc. Also, Marine and Stationary Engines all sizes, Sugar mills and Engines, Horse mills, and every kind of Machinery usually required for the operations of the country. He has paid particular attention to getting up machinery, etc., for Gold Mine operations, and those in want of such work might find it to their advantage to give him a call.

J. R. ANDERSON.

Richmond, Va., Sept. 10, 1850.

**CUT NAILS OF BEST QUALITY, BAR IRON** (including Flat Rails) manufactured and for sale by  
FISHER, MORGAN & CO.,  
75 N. Water St., Philadelphia.

**TO RAILROAD COMPANIES, CAR MANUFACTURERS, etc.**

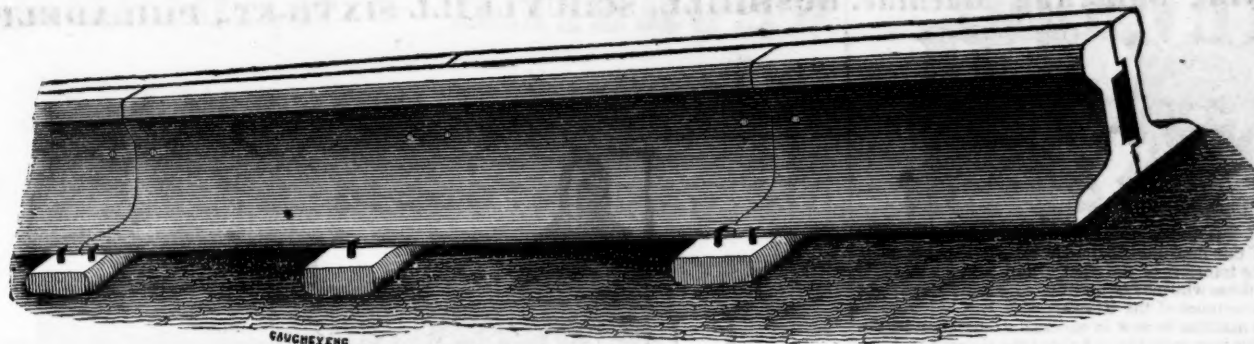
**THE** Undersigned hereby gives public notice, that the Commissioner of Patents, pursuant to his decision in relation thereto, on the 8th day of October, 1850, issued to him a Patent for the sole right to manufacture, and exclusive use of the **INDIA RUBBER CAR SPRING**, on account of priority of invention of said Spring.

F. M. RAY.

New York, Oct. 23, 1850.



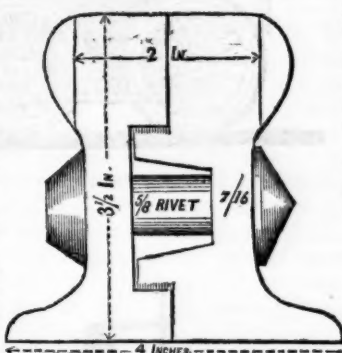
## PATENT COMPOUND RAIL.



**THE UNDERSIGNED NOW OFFER TO THE** Railroad Public a new Compound Railroad Bar, which possesses, as they believe, a decided superiority over every kind now in use. The Cuts annexed will give a good idea of the form of the Rail, and the mode of combination.

This Rail has now been in use on the New York and Erie and the Utica and Schenectady Railroads for nearly two years, and has proved itself to be a *durable and continuous* rail, realizing the advantages of a theoretically perfect rail, over the one in common use. We invite the attention of Railroad Companies to a careful examination of the merits of the form now offered.

The advantages of this Rail are: first, it effects a saving of from 25 to 50 per cent. in the wear and tear of the machinery; secondly, it saves to a vastly greater extent in the repairs of track; thirdly, it secures a much higher rate of speed with the same power; and what is of still



greater importance, it offers complete protection against most of the accidents to which companies are liable. For these reasons, it is believed to be not only the best, but the cheapest rail that can be used. In enumerating its advantages, the proprietors only repeat the statements of competent persons, who have had the best opportunities of judging of its merits.

This improved Rail is now being manufactured at the Works of the Mount Savage Iron Co. in Maryland. Any communications or enquiries addressed to either of the undersigned will receive prompt attention.

J. F. WINSLOW, President,  
Troy, N. Y.  
ERASTUS CORNING, Albany.  
WARREN DELANO, Jr., N. Y.  
JOHN M. FORBES, Boston.  
ENOCH PRATT, Baltimore.

April 8, 1851.

N.B.—Patterns of the above rail are placed with Mr. A. V. Winslow, Cincinnati, Ohio, who is authorised to negotiate with parties for the same.

### Faggotted Car and Engine Axles

**FORGED** by RANSTEAD, DEARBORN & Co., Boston, Mass. These Axles enjoy the highest reputation for excellence, and are all warranted.

### Iron Trade of Pennsylvania.

**DOCUMENTS** and Statistics relating to the Manufacture of Iron in the State of Pennsylvania—giving a history of the manufacture from its commencement to this date, illustrated by diagrams. Also tables giving the address and capacity of every establishment in the State. Prepared by direction of the late convention of the trade held in Philadelphia. For sale by

LINDSAY & BLACKISTON, Philadelphia.  
FIELDING LUCUS, Jr., Baltimore.  
HENRY G. NICHOLS, 79 Water st., N. Y.  
or at this office—price \$1 00.

It will be sent by mail to any order enclosing the money, and post paid.

### Ulster Iron.

**THE ULSTER IRON WORKS**, Saugerties, N. Y., continue in full operation. Orders for round, square, flat, band, hoop and scroll iron, will be received and promptly executed by

J. & L. TUCKERMAN,  
69 West St., New York.

### India-rubber for Railroad Cos.

**RUBBER SPRINGS**—Bearing and Puller—Fuller's Patent—Hose from 1 to 1 1/2 inch diameter. Suction Hose. Steam Packing from 1-16 to 2 in thick. Rubber and Gutta Percha Bands. These articles are all warranted to give satisfaction, made under Tyer & Helm's patent, issued January, 1849. No lead used in the composition. Will stand much higher heat than that called "Goodyear's," and is in all respects better than any in use. Proprietors of rail roads do not be overcharged by pretenders.

HORACE H. DAY,  
Warehouse 23 Courtlandt street  
New York, May 21, 1849.

### Railroad Iron.

**2000 TONS** T RAILS, of desirable pattern, arrived, and to arrive, for sale by  
RAYMOND & FULLERTON,  
45 Cliff st.

6121

### Railroad Iron.

**THE MOUNT SAVAGE IRON WORKS**, Alleghany county, Maryland, having recently passed into the hands of new proprietors, are now prepared, with increased facilities, to execute orders for any of the various patterns of Railroad Iron. Communications addressed to either of the subscribers will have prompt attention. J. F. WINSLOW, President

Troy, N. Y.  
ERASTUS CORNING, Albany  
WARREN DELANO, Jr., N. Y.  
JOHN M. FORBES, Boston.  
ENOCH PRATT, Baltimore, Md

November 6, 1848.

### Railroad Iron.

**THE SUBSCRIBERS ARE PREPARED TO** take orders for Railroad Iron to be made at their Phoenix Iron Works, situated on the Schuylkill River, near this city, and at their Safe Harbor Iron Works, situated in Lancaster County, on the Susquehanna river; which two establishments are now turning out upwards of 1800 tons of finished rails per month.

Companies desirous of contracting will be promptly supplied with rails of any required pattern, and of the very best quality.

REEVES, BUCK & CO.  
45 North Water St. Philadelphia.  
March 15, 1849.

### LAP—WELDED WROUGHT IRON TUBES

FOR

### TUBULAR BOILERS, FROM ONE AND A QUARTER TO SEVEN INCHES IN DIAMETER.

**THE ONLY** Tubes of the same quality and manufacture as those so extensively used in England Scotland, France and Germany, for Locomotive, Marine and other Steam Engine Boilers.

THOMAS PROSSER & SON, Patentees,  
28 Platt street, New York.

### AMERICAN PIG IRON.

"POUGHKEEPSIE" brand, Dutchess Co., N. Y.  
"GLENDALE" brand, Lehigh county, Pa.  
Orders for the above two well known brands will be received, and promptly executed, by  
J. & L. TUCKERMAN,  
69 West St., New York.

### American Cast Steel.

**THE ADIRONDAC STEEL MANUFACTURING CO.** is now producing, from American iron, at their works at Jersey City, N. J., Cast Steel of extraordinary quality, and is prepared to supply orders for the same at prices below that of the imported article of like quality. Consumers will find it to their interest to give this a trial. Orders for all sizes of hammered cast steel, directed as above, will meet with prompt attention.

May 28, 1849.

**PATENT HAMMERED RAILROAD, SHIP & BOAT SPIKES.**—The Albany Iron Works have always on hand, of their own manufacture, a large assortment of Railroad, Ship and Boat Spikes from 2 to 12 inches in length, and of any form of head. From the excellence of the material always used in their manufacture, and their very general use for rail roads and other purposes in this country, the manufacturers have no hesitation in warranting them fully equal to the best spikes in market, both as to quality and appearance. All orders addressed to the subscribers at the works will be promptly executed.

JOHN F. WINSLOW, Agent.  
Albany Iron and Nail Works, Troy, N. Y.  
The above Spikes may be had at factory prices, at Erastus Corning & Co Albany; Merritt & Co., New York; E. Pratt & Brother, Baltimore, Md

### Stickney & Beatty, DEALERS IN IRON AND IRON MANUFACTURERS.

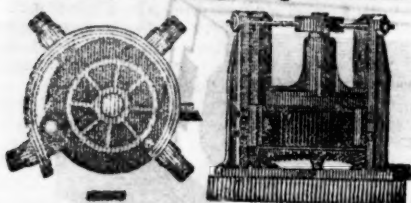
**AGENTS** for the Baltimore City Rolling Mill (Works of Messrs. Ellicott) also agents for the sale of the Laurel, Locust Grove and Gunpowder (Balt.) Forge Pig Irons; Hupp's Cold Blast Columbia Wheel Iron, Fort and anti-Eaton Pig Irons. Caledonia, Columbia and Capon Cold Blast Boiler Blooms, warranted; Wm. Jessop & Son's Steel; Old Colony and anti-Eaton Nails; Bar Iron, Boiler Plates, Hoop, Sheet, Oval, Half Oval, Horse Shoe and other Iron. Exchange Place, Baltimore.

### Railroad Iron.

**2000 Tons**, weighing 58 pounds per lineal yard, of the most approved pattern of T rails, in store and to arrive, for sale by  
COLLINS, VOSE & CO.,  
74 South St.  
New York, June 1, 1850.

## MACHINERY.

## Henry Burden's Patent Revolving Shingling Machine.



THE Subscriber having recently purchased the right of this machine for the United States, now offers to make transfers of the right to run said machine, or sell to those who may be desirous to purchase the right for one or more of the States.

This machine is now in successful operation in ten or twelve iron works in and about the vicinity of Pittsburgh, also at Phoenixville and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous: considerable saving in first cost; saving in power; the entire saving of shingler's, or hammerman's wages, as no attendance whatever is necessary, it being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from sixty puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of staffs, as none are used or required. The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal as under the hammer. The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery. The bars roll sounder, and are much better finished. The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated. For further particulars address the subscriber at Troy, N. Y. P. A. BURDEN.

## Railroad Spikes and Wrought Iron Fastenings.

THE TROY IRON AND NAIL FACTORY, exclusive owner of all Henry Burden's Patented Machinery for making Spikes, have facilities for manufacturing large quantities upon short notice, and of a quality unsurpassed.

Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad fastenings, also made to order. A full assortment of Ship and Boat Spikes always on hand.

All orders addressed to the Agent at the Factory will receive immediate attention.

P. A. BURDEN, Agent,  
Troy Iron and Nail Factory, Troy, N. Y.

**CHILLED RAILROAD WHEELS.**—THE UNDERSIGNED are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the hubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,  
Willow St., below 13th,  
Philadelphia, Pa.

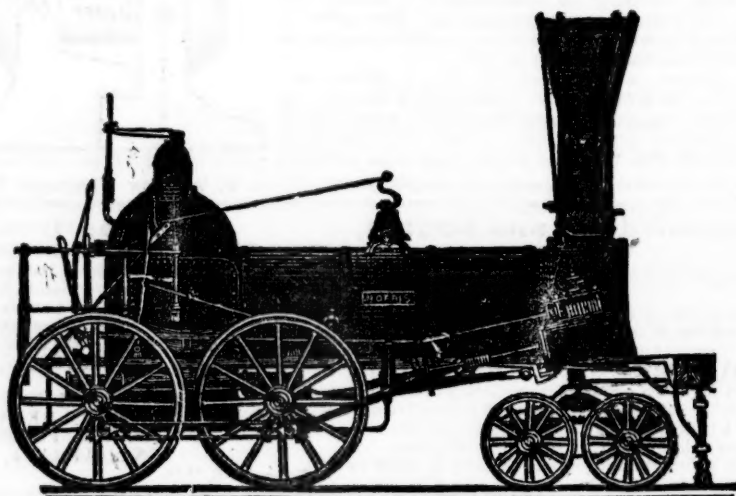
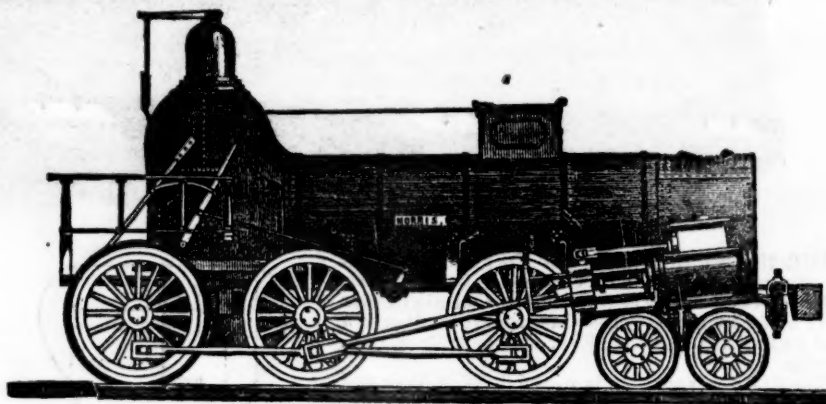
Brown's Old Established SCALE WARE HOUSE,  
NO. 234 WATER ST., NEW YORK.

THE Subscriber, Practical Manufacturer of Scales of every description, respectfully asks the attention of Railroad Companies to his Improved Wrought Iron Railroad Track and Depot Scales which for strength, durability, accuracy, convenience in weighing, and beauty of workmanship, are not surpassed by any others in this country.

He is aware that this is rather a bold assertion for him to make, yet he can say with confidence that they have but to be tried to give them precedence over all others.

J. L. BROWN.  
Bank Scales made to order, and all Scales of this make Warranted in every particular.

Reference given!

NORRIS' LOCOMOTIVE WORKS.  
BUSHHILL, SCHUYLKILL SIXTH-ST., PHILADELPHIA,

THE UNDERSIGNED Manufacture to order Locomotive Steam Engines of any plan or size. Their shops being enlarged, and their arrangements considerably extended to facilitate the speedy execution of work in this branch, they can offer to Railway Companies unusual advantages for prompt delivery of Machinery of superior workmanship and finish.

Connected with the Locomotive business, they are also prepared to furnish, at short notice, Chilled Wheels for Cars of superior quality.

Wrought Iron Tyres made of any required size—the exact diameter of the Wheel Centre, being given, the Tyres are made to fit on same without the necessity of turning out inside.

Iron and Brass castings, Axles, etc., fitted up complete with Trucks or otherwise.

NORRIS, BROTHERS

## PATENT MACHINE MADE HORSE-SHOES.

The Troy Iron and Nail Factory have always on hand a general assortment of Horse Shoes, made from Refined American Iron.

Four sizes being made, it will be well for those ordering to remember that the size of the shoe increases as the numbers—No. 1 being the smallest.

P. A. BURDEN, Agent,  
Troy Iron and Nail Factory, Troy, N. Y.

## Etna Safety Fuse.

THIS superior article for igniting the charge in wet or dry blasting, made with DUPONT'S best powder, is kept for sale at the office and depot of

REYNOLDS & BROTHER,

Manufacturers,  
No. 85 Liberty St.

NEW YORK.

And in the principal cities and towns in the U. States.

The Premium of the AMERICAN INSTITUTE was awarded to the Etna Safety Fuse at the late Fair held in this city.

November 3, 1849,

ly

## UNION WORKS,

North street, opposite the Railroad Depot,  
BALTIMORE.

## Poole &amp; Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up Arrangements of Wrought Iron Pipes for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

## Patent Machine Picket Fence

SIX DIFFERENT STYLES of this fence are now made by patent machinery; and is by far the most economical fence for Railroads, Farms, Yards, etc., ever yet offered to the public, costing only from 4 to 30 cents per foot, according to pattern; and is so put up as to be shipped at a trifling expense. Full particulars will be furnished, by addressing the subscriber, to whom all orders should be sent.

N. STRATTON, Troy N.Y.